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ABSTRACT

This report documents the 1985-86 Title VII Program of the Austin (Texas) Independent School District. Major findings indicated the following: (1) three program components--staff training, tutoring, and curriculum development--were implemented as planned; (2) the staff training component included a series of English as a Second Language endorsement courses and teachers' checklist responses showed significant improvement in their ability to organize instruction and use audiovisuals with Limited English Proficient (LEP) students; (3) both tutored and nontutored project LEP students made significant gains on the Language Assessment Battery (LAB), but tutored students did not make significantly greater gains than nontutored students; (4) as part of the curriculum development component a resource collection of multilevel content area materials for four project schools were purchased and an annotated bibliography of multilevel instructional materials was developed; (5) Project LEP students at Murchison Junior High and Travis High Schools made significant gains in reading, language, mathematics, social studies, and science as measured by La Prueba Riverside de Realizacion en Espanol; and (6) proposed objectives that 85% of students involved in Title VII would make gains on the Prueba Riverside, LAB, Iowa Tests of Basic Skills, or Tests of Achievement and Proficiency were not met. Seven appendices make up the majority of this document and are titled as follows: (1) Language Assessment Battery (LAB); (2) Iowa Tests of Basic Skills (ITBS), Tests of Achievement and Proficiency (TAP); (3) La Prueba Riverside de Realizacion en Espanol; (4) Criterion-Referenced Teacher Competency Checklist; (5) Administrator Interviews; (6) Teacher Survey; and (7) Tutor Records. (KSA)

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**TITLE VII PROGRAM
FINAL TECHNICAL REPORT: 1985-86**

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TITLE VII PROGRAM -- EVALUATION 1985-86

EXECUTIVE SUMMARY

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MAJOR FINDINGS

1. The three program components -- staff training, tutoring, and curriculum development -- were generally implemented as planned.
2. The staff training component included a series of English-as-a-Second Language (ESL) endorsement courses; 24 secondary teachers enrolled in the first two courses offered. Teachers' checklist responses showed significant improvement in their ability to organize instruction and use audiovisuals with LEP students.
3. During school year 1985-86, 76 project students were tutored by 48 tutors in 18 subjects. The five major content areas covered were reading, language, mathematics, social studies, and science. While both tutored and nontutored project LEP students made very significant gains on the Language Assessment Battery (LAB), tutored students did not make significantly greater gains than nontutored students.
4. As part of the curriculum development component in 1985-86:
 - Title VII Project purchased a resource collection of multilevel content area materials for each of the four project schools.
 - The first part of the handbook, an annotated bibliography of multilevel instructional materials, was developed.
5. On the average, project LEP students at Murchison Junior High and Travis High Schools made significant gains in reading, language, mathematics, social studies, and science as measured by La Prueba Riverside de Realización en Español (Prueba Riverside).
6. Project objectives were that 85% of the students involved in Title VII would make gains on the Prueba Riverside, LAB, and Iowa Tests of Basic Skills (ITBS)/ Tests of Achievement and Proficiency (TAP). These objectives were not met.

WHAT IS THE TITLE VII PROGRAM?

Title VII is a federally-funded program designed to improve the English proficiency and academic achievement of limited-English-proficient (LEP) students. The Austin Independent School District's (AISD) Title VII program for secondary students was first implemented in 1985-86. It is designed to enhance the District's regular program for Hispanic LEP students. This regular program includes:

- Bilingual (English/Spanish) instruction in major content areas for students of limited English ability (Murchison Junior High only);
- A new self-contained literacy program for recent Hispanic immigrants with limited schooling and English skills (Murchison only);
- English-as-a-Second Language (ESL) instruction, focusing on listening, speaking, and writing skills for one period a day (all junior and senior high schools with LEP students); and
- A new class, Spanish for Native Speakers, providing additional English instruction and work in translating Spanish to English and vice versa for limited English speakers (Travis High only).

The 1985-86 Title VII program provided three additional services:

- Staff training (through ESL endorsement courses and campus workshops),
- Student tutoring, and
- Curriculum development.

WHO WAS ELIGIBLE FOR THE 1985-86 PROGRAM?

Four campuses with the greatest concentration of Hispanic LEP students were served during 1985-86: Murchison Junior High, Anderson High, Johnston High and Travis High.

LEP students monolingual in Spanish (category A) or dominant in Spanish with some limited English ability (category B) were eligible for Title VII program services at each of these campuses.

LEP status is determined by the District's identification procedures in accordance with TEA and the United States Office for Civil Rights guidelines. The Language Assessment Battery (LAB) was used to determine language proficiency and dominance.

All Title VII and AISD program services were not available at each campus in 1985-86. The chart on the next page designates services provided by campus.

<u>Title VII Components</u>	<u>CAMPUSES</u>			
	<u>Murchison</u>	<u>Anderson</u>	<u>Johnston</u>	<u>Travis</u>
1. Staff training	X	X	X	X
2. Curriculum development	X	X	X	X
3. Tutor Support	X	X ¹	X	
<u>AISD Programs</u>				
1. Bilingual content area instruction	X			
2. English-as-a-Second Language (ESL) instruction	X	X	X	X
3. Literacy program	X			
4. Spanish for Native Speakers				X

Figure 1. SERVICES PROVIDED TO LIMITED-ENGLISH PROFICIENT STUDENTS 1985-86. Title VII and other AISD program services are reflected at the four campuses.

¹Tutoring was not provided at Anderson during the second semester.

STAFF TRAINING

WHAT IS THE STAFF TRAINING COMPONENT?

Two types of training were available to any teachers interested at the four campuses.

- Secondary teachers from the four project schools involved in a series of four ESL endorsement courses, and
- All interested staff and administrators at these campuses who were involved in a series of ESL techniques workshops.

During the first two ESL endorsement courses, 24 secondary teachers at the four projects schools participated. Two more courses will lead to endorsement certification. Interested staff and administrators at the four schools were involved in a series of ESL techniques workshops.

HOW EFFECTIVE WAS THE STAFF TRAINING COMPONENT?

At the beginning of the semester, participants in the second ESL endorsement course were administered Teacher Self-Inventories, developed by the Office of Research and Evaluation. The self-inventory was a competency checklist on which teachers rated their ability to apply ESL methodology in the classroom.

There was a positive pattern of movement in responses between the pre- and post-surveys (see Figure 2). The means increased for 11 of 12 items. However, regression analyses revealed these differences in pre- and posttraining means were significant in only two cases. Teachers felt better prepared to organize instruction and use audiovisuals to promote LEP student learning (Items 5 & 9).

To meet the objective, participating teachers needed to master 85% of the project-related staff development skills presented to them during endorsement training sessions. In order to measure achievement of the objective, mastery was defined as agreeing or strongly agreeing with self-inventory statements. Of the 14 teachers responding, 6 reported feeling competent on 85% (10 of 12) of the items. Thus, the objective was not met as stated based on this measure.

However, at least 70% of the posttest respondents saw themselves as competent in working with LEP students in terms of:

- responding to specific language needs,
- helping students stay on task,
- making content area relevant and useful,
- developing appropriate objectives.

Course grades for the project teachers were also examined. A grade of "A" or "B" was used as the criterion for mastery. Of the 17 who completed the course, 10 (58%) met the criterion for staff development skill mastery. This also does not provide support for achievement of the objective.

According to these data, project teachers are increasing their ESL instructional skills after two courses in the projected four course ESL endorsement series. However, as a group, they did not meet the desired 85% mastery level.

Six workshops were implemented during the second semester of 1985-86 for interested educators of the four project schools.

- January 8, 1986 - How to adapt the textbook to the reading level of the limited English student
- January 22, 1986 - How to design content area lessons for the LEP student
- February 5, 1986 - How to unmotivate the LEP student
- February 19, 1986 - Prejudisms and stereotyping of LEP students
- March 5, 1986 - Madeline Hunter and the LEP student
- March 19, 1986 - How to use tutors effectively with LEP students in the classroom

Item	N		Mean	
	Pre	Post	Pre	Post
1. I feel prepared to teach LEP students.	17	14	3.53	3.86
2. I am comfortable teaching my content area to LEP.	17	13	3.70	4.00
3. I am able to evoke class participation of my LEP students.	14	14	3.86	3.71
4. I am responsive to LEP students' needs.	16	14	3.44	3.71
5. My present organization of instruction is adequate to meet the needs of LEP students.	17	14	2.59	3.57*
6. I can adequately help my LEP students stay on task.	17	14	3.18	3.86
7. My instruction of the content area is relevant to and useful for LEP students.	17	14	3.53	4.07
8. I can adequately design objectives appropriate for the needs of my LEP students.	17	14	3.65	3.86
9. I can utilize audiovisual equipment effectively to augment LEP students learning.	17	14	3.29	4.07*
10. I employ varied and student-appropriate evaluation strategies when assessing my LEP students.	17	14	3.47	3.86
11. In terms of my instructional objectives, I am able to individualize activities appropriate for the special needs and levels of my LEP students.	17	14	3.18	3.57
12. I employ a variety of strategies to clarify instruction (e.g. modeling, audiovisual examples, whole group responses, etc.)	17	14	3.71	3.86

The scale ranged from Strongly Agree (5) to Strongly Disagree (1)

*Items showing statistically significant gains.

Figure 2. COMPARISON OF MEAN GAINS IN ESL METHODOLOGY AS MEASURED BY TEACHER SELF INVENTORIES. Responses were retained anonymously resulting in unequal sample sizes pre and post.

TUTORING

WHAT IS THE TUTORING COMPONENT?

University of Texas tutors enrolled in a multicultural education course were placed with LEP tutees in classes at Murchison and Johnston during the first semester of school year 1985-86. During the second semester tutors were also placed at Anderson.

English speaking tutors were able to work with Hispanic LEP students by adapting and simplifying materials, e.g., with illustrations, note-taking, clarification of vocabulary, utilization of Spanish/English dictionaries, and identification of main concepts.

WHO WAS SERVED? IN WHAT SUBJECTS?

During school year 1985-86, 76 project LEP students were tutored by 48 tutors in eighteen subjects.

- | | | |
|------------------|-------------------|--------------------|
| ● Mathematics | ● Reading | ● American History |
| ● English | ● Art | ● World History |
| ● Computers | ● Government | ● Geography |
| ● Science | ● Biology | ● Physical Science |
| ● ESL | ● World Geography | ● Texas History |
| ● Social Studies | ● Algebra | ● Earth Science |

Some of these students received tutoring in more than one subject. Thus, in a duplicated count, 122 students were tutored in subjects in the content areas of reading, language, mathematics, social studies, and science. (See Figure 3 below.)

SUBJECT	GROUP	FREQUENCY	PERCENT
Reading	Nontutored	153	90.533
	Tutored	16	9.467
Language	Nontutored	118	69.822
	Tutored	51	30.178
Mathematics	Nontutored	149	88.166
	Tutored	20	11.834
Social Studies	Nontutored	151	89.349
	Tutored	18	10.651
Science	Nontutored	152	89.941
	Tutored	17	10.059

Figure 3. BREAKDOWN OF 122 STUDENTS TUTORED (DUPLICATED COUNT) BY CONTENT AREAS. Frequency and percent of those tutored is compared to that of the nontutored. Total number of LEP students available to be tutored was 169.

HOW EFFECTIVE WAS THE TUTOR COMPONENT?

The effectiveness of the tutor component was measured by student gains on the Language Assessment Battery (LAB) and the Iowa Tests of Basic Skills/Tests of Achievement and Proficiency (ITBS/TAP).

LAB

On the LAB, which measures English language skills, both tutored and nontutored students showed statistically significant gains. However, tutored students did not gain significantly more than nontutored students; the overall gains of the tutored students exceeded those of the nontutored by slightly more than one point. Those who received more tutoring did not necessarily have greater gains than those with small amounts.

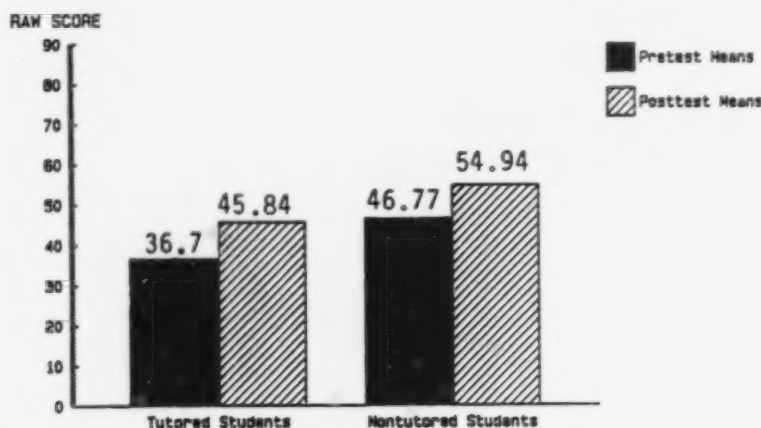


Figure 4. COMPARISON OF LAB MEAN SCORES FOR TUTORED AND NONTUTORED STUDENTS FOR 1985-86. Gains of tutored students (N=58) exceeded those of nontutored (N=65) by slightly more than one point.

ITBS/TAP

The number of project LEP students who had test scores for both spring, 1985 and spring, 1986 was limited because:

- Many students enrolled in AISD in fall, 1985, and therefore had no scores for spring, 1985.
- LEP A and B students are often exempted from taking the ITBS/TAP test because of limited knowledge of English.

As can be seen in Figure 5, the number of tutored LEP students with test scores was less than 10 except in language. Significance tests were therefore not done. In language, tutored students made mean gains of .96 grade equivalents (GE) in a year, while nontutored students made average gains of 1.60 GE years.

SUBJECT	N	1985 MEAN	1986 MEAN	MEAN GAIN
TUTORED				
Reading	2	3.95	5.45	1.50
Language	21	4.80	5.76	.96
Mathematics	7	5.29	7.04	1.76*
Soc.Studies	4	5.58	8.05	2.48*
Science	2	7.40	8.15	.75
NONTUTORED				
Reading	56	4.96	5.93	.97
Language	36	4.79	6.39	1.60
Mathematics	51	6.29	7.28	.99
Soc.Studies	53	5.07	6.19	1.12
Science	05	6.90	7.10	.20

Figure 5. ITBS/TAP GRADE EQUIVALENT (GE) GAINS FOR TUTORED AND NONTUTORED HISPANIC LEP A & B STUDENTS AT PROJECT SCHOOLS. Grades 7-12 combined except for science test (grade 9-12 only). Social studies is measured by Work Study Skills (ITBS) and Social Studies (TAP).
 * = Difference between means gains and reported total gain is due to rounding off.

Several factors should be considered in interpreting these results.

- Many students scored at the chance level on both the pre- and posttests. Also, there was great variability in the size of gains made by individual students.
- The best comparison group available was tutored vs. nontutored students. However, students were not randomly assigned to be tutored or not. It appears the lowest achievers were tutored. Therefore, groups are not as comparable as would be desired.

Changes in the tutor component might also enhance effectiveness. The program might consider setting requirements of a minimum number of minutes per individual tutoring session and/or a minimum number of tutored times per project student. Some project LEP A and B students were omitted from the data analysis because they had received less than fifteen minutes of tutoring over the year. For these students the time spent was probably too short to be effective. The program may also want to strengthen the training provided to tutors in ESL instructional strategies, since most do not know Spanish. Finally, some nonproject students were also served by the tutors. Project students might receive more service if this did not occur.

Teacher Survey

Along with the two objective measures of student achievement, teachers who had tutors were also asked about the effectiveness of the tutor component on the Districtwide Survey in April, 1986. They were generally very positive about tutor impact.

- Of the eight responding teachers, two-thirds (66.6%, N=6) indicated that students had greatly or somewhat improved their English skills as a result of working with Title VII tutors. However, two teachers said there was little improvement; one indicated that she/he saw no improvement.
- Most of the teachers (88.8%, N=8) indicated that their students had improved in academic skills as a result of working with tutors; one said that she/he saw little improvement.
- Most of the teachers (77.7%, N=7) indicated that their students' attitudes toward learning had greatly or somewhat improved as a result of working with tutors; two said they saw little improvement.

CURRICULUM DEVELOPMENT

WHAT IS THE CURRICULUM DEVELOPMENT COMPONENT? HOW EFFECTIVE WAS IT?

The third component of AISD's Title VII program was in its early stages in 1985-86. All activities will be completed in three years. In this first year, evaluation consisted of checking on completion of planned activities. All were completed.

- The Title VII Project purchased a resource collection of multilevel content area materials for each of the four project schools. Books, kits, and computer software for social studies, math, science, practical life skills, language arts and ESL are included in the collections.
- Some teachers received the first part of the handbook which is in preparation--an annotated bibliography of multilevel instructional materials.

HOW EFFECTIVE WAS THE TITLE VII PROGRAM?

The three program components were generally implemented as planned during the first year of the program, 1985-86. They were designed to impact the English language acquisition and academic skills of Hispanic project LEP A and B students. Although these achievement objectives were not met, they may have been unrealistic criterion for a first year program just being implemented. Teachers are not yet fully trained, curriculum materials were placed at the schools late in the year, and all students were not tutored.

There were some overall objectives that have not been discussed. Achievement and language proficiency objectives stated that 85% of the participants would show gains between pre- and posttesting on standardized tests.

- LAB - This objective as stated was not met. Student test results were examined as a measure of English proficiency. Of the 131 LEP A and B students with pre- and posttest English LAB scores, 109 (83.2%) made gains on the English LAB; 22 did not. To meet the objective, three more students would have needed to show gains.
- ITBS - The objective as stated was not met. Students who had ITBS/TAP scores for both 1985 and 1986 were looked at in terms of percentile gains. The percentage showing gains in major test areas was:

Reading	55%	Social Studies	57%
Language	72%	Science	25%*.
Mathematics	62%		

*A science test is not given to junior high students as part of the ITBS in AISD; therefore these scores could not be included in this data analysis.

- La Prueba Riverside -- The objectives as stated were not met. La Prueba Riverside was used as a measure of Spanish language proficiency and achievement gains.

--Raw score gains of the students who had La Prueba Riverside pre- and posttest scores at Murchison and Travis for 1985-86 were examined by subject area. The percentage showing gains in raw scores was:

Reading	58%	Social Studies	57%
Language	58%	Science	55%.
Mathematics	64%		

It should be note that only 61-65 students had pre- and posttest scores in each test area. Most scores were well below the 40th percentile on both the pre- and posttests.

--However, significant overall gains were made by project LEP A&B students in all subtest areas as can be seen below:

VARIABLE	N	MEAN	SIGNIFICANCE
Reading	91	1.1429	.0106**
Language	92	.9565	.0153*
Mathematics	93	1.4301	.0004**
Social Studies	92	.8370	.0494*
Science	92	1.2174	.0023**

Figure 6. LA PRUEBA RIVERSIDE RAW SCORE MEAN GAINS.
T-tests were run to check pre- to posttest gains for significance.

* = Significance at the .05 level of probability

** = Significance at the .01 level of probability

It is interesting to note that when the schools were examined separately, Murchison project LEP students made significant gains in all areas except social studies. Students at Travis, however, did not make significant gains. This discrepancy may be influenced by the difference in programs at the two schools. At Murchison students are enrolled in an intensive Transitional Bilingual Education Program whereas students at Travis participated in a new ESL/content area support program (but receive no bilingual instruction).

Since the Title VII Program enhances existing bilingual programs at the project schools, it is difficult to separate program effects. This is particularly true at Murchison and Travis. Figure 7 below looks at gains over a two-year period for Hispanic LEP students. All were in the Transitional Bilingual Education, ESL, and/or Literacy program. Many were served by Title V.I.

Grade in 1985		N	1984 Pretest	1985 Posttest	Gain
7	Reading	22	3.65	5.11	1.46
	Language	16	4.24	5.67	1.43
	Mathematics	32	5.81	7.19	1.38
8	Reading	9	4.67	5.64	.97
	Language	9	4.66	5.34	.68
	Mathematics	10	6.66	7.72	1.06
Grade in 1986		N	1985 Pretest	1985 Posttest	Gain
7	Reading	10	3.74	5.40	1.66
	Language	10	3.78	5.60	1.82
	Mathematics	10	6.30	7.95	1.65
8	Reading	42	4.76	5.98	1.22
	Language	42	4.67	6.01	1.34
	Mathematics	42	6.98	7.76	.78

Figure 7. COMPARISON OF MURCHISON GRADE EQUIVALENT GAINS OVER TWO YEARS. Reading Total, Language Total, and Mathematics Computation scores on the ITBS were utilized. Two groups are reflected--those at Murchison in 1984-85 and those there in 1985-86.

For those students able to be tested for two years in a row:

- Both groups generally showed gains exceeding one GE year (the national average) in all three areas (9 of 12 comparisons). Exceptions were grade 8 1984-85 reading and language and grade 8 1985-86 mathematics computation. Gains exceeding one GE help these students close the gap between their performance and the national average.
- Seventh and eighth graders in 1985-86 showed greater gains than those in the same grade in 1984-85 in 5 of 6 comparisons. Differences ranged from .2 to .66 of a GE year. The one exception was grade 8 mathematics, in which case the 1984-85 students gained 1.06 GE year compared to .78 of a year for the 1985-86 group.

- Most of those in grade 8 this year attended Murchison last year as 7th graders. These students continue to make strong growth this year, although it is not quite as strong as last year. The one weak area was mathematics computation, with a gain of .78 this year compared to 1.38 last year. However, it should be noted that the bilingual mathematics teacher left during the 1985-86 school year, and several substitute teachers were hired until a long-term substitute stayed for the remainder of the year.
- Both groups remained below the national average except in **mathematics computation for the 1985-86 7th graders**. Mathematics computation scores were the highest overall. Students were furthest below the national average in reading at grade 8 in 1984-85 (3.16).

Overall, the Murchison Program appears quite successful with most Spanish-dominant students who can be tested.

At Travis, the Title VII program was not the only new language assistance program implemented during school year 1985-86. Hispanic LEP A and B students were also able to take advantage of the Sheltered Bilingual (enhanced ESL) Program.

Only 14 students had ITBS or TAP scores from both 1985-86 and 1984-85 (about 56 students participated). Many were new to AISD this year and some who were not new could not understand English well enough to be tested last year and/or this year.

For those students tested in 1985-86 and 1984-85:

- About half demonstrated gains of 1 GE year or more in each test area.
- Student achievement is still below the national average in all grade and subject areas.

Overall, the bilingual/ESL services appear to be impacting student gains at Murchison and Travis.

Reference

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Austin, Texas: Office of Research and Evaluation (Pub. No. 86.25),
Austin Independent School District, February, 1987.

Title VII Program
LANGUAGE ASSESSMENT BATTERY
Appendix A

LANGUAGE ASSESSMENT BATTERY

Purpose

The Language Assessment Battery (LAB) is administered in English to provide a means of determining the English proficiency of secondary pupils for whom English is not the primary language spoken. The LAB was used to provide information concerning:

Decision Question D1: Should the Title VII program be continued as it is, modified, or discontinued?

Evaluation Question D1-1. Do project participants exhibit significant gains in their English language proficiency?

Evaluation Question D1-5. How do the English proficiency and achievement gains of students receiving tutoring compare to students who were not tutored?

Information Need I2. Did the project meet its objectives?

Procedure

The LAB was administered to all project participants (LEP A & B students) between October 15 and November 22, 1985, to provide a baseline for comparison with results from the April and May of 1986 re-evaluation. At Murchison the TBE teachers administered the group segment of the test while the individual part was given by the project specialist and Office of Research and Evaluation staff members. At Travis and Anderson, the project specialist and LPAC chairperson (LEP coordinator) administered both the group and individual parts.

The late pretest at Murchison (ending November 22, 1985) was due to the unexpected increase in the number of LEP students who needed to be tested.

From April 25 to May 12, 1986, the posttest was administered using the same personnel for testing at the four schools.

LAB scores were entered on a computer screen by the clerk for bilingual programs. The programmer analyst wrote a program and transferred the pretest scores to a Statistical Analysis System (SAS) data file tape in March of 1986. Posttest scores were entered and merged with the original SAS data file in May of 1986 (SA-BY001-0102). The percentage of student gains were hand tabulated from the merged SAS program in November, 1986. The programmer ran a SAS PROC MEANS (SA-BY002-0301) to analyze the gains for significance, overall and by grade (7-12). (See Attachment A-1.)

Results

Evaluation Question D1-1: Do project participants exhibit significant gains in their English Language proficiency?

As can be seen in Figure A-1, overall the students at the four project schools made highly significant gains. When looked at by schools, two thirds had significant gains (.05 or greater). (See Attachment A-1, pp. 06 & 20.)

STUDENTS WERE TUTORED									
VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PROB(T)
PREENG	58	36.6726	12.4201	16.0000	44.0000	1.6308	33.868	22.49	0.0001
POSTENG	58	45.8448	14.4220	21.0000	72.0000	1.8937	31.458	24.21	0.0001
LABGAIN	58	9.1722	9.3288	-13.0000	28.0000	1.2249	101.703	7.44	0.0001
STUDENTS WERE NOT TUTORED									
VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PROB(T)
PREENG	65	46.7692	15.9548	21.0000	73.0000	1.9789	34.114	23.63	0.0001
POSTENG	65	54.9385	15.5532	24.0000	82.0000	1.9291	28.310	28.48	0.0001
LABGAIN	65	8.1692	8.9854	-22.0000	30.0000	1.1145	109.990	7.33	0.0001

Figure A-1. SIGNIFICANT OVERALL RAW SCORE GAINS OF TUTORED AND NONTUTORED PROJECT LEP A AND B STUDENTS. The highest score that can be earned on the LAB is 92.

Evaluation Question D1-1: How do the English proficiency and achievement gains of students receiving tutoring compare to students who were not tutored (Johnston and Murchison experimental versus control groups)?

During the spring semester of 1986, tutors were also assisting students at Anderson High School. Thus, Anderson was also compared with a control group. At all three schools (Travis was excluded) control groups consisted of nontutored project A & B students. All those tutored at the schools were considered the treatment subjects, and all those not tutored were the controls.

A SAS program was run (SA-BY002-0301) to compare tutored students with their nontutored cohorts overall, by school, and by grade. This SAS program also included a SAS PROC MEANS to check the significance of the gains of each group.

As can be seen from Attachment A-1, page 4 and page 18 and Figure A-2 on the following page, overall the gains of the tutored students (9.14 points) exceeded those of the nontutored (8.17) by slightly more than one point. This difference between the groups was examined for significance; the programmer analyst ran a PROC SORESPOT (SA-BY002-0501) program of regression analysis and F tests (SA-JF065-0601-X). No statistical significance was found. (See Attachment A-2 & A-3.) Moreover, those who received more tutoring did not necessarily have the greatest gains. (See Attachment A-1, pp.04 to pp.18.)

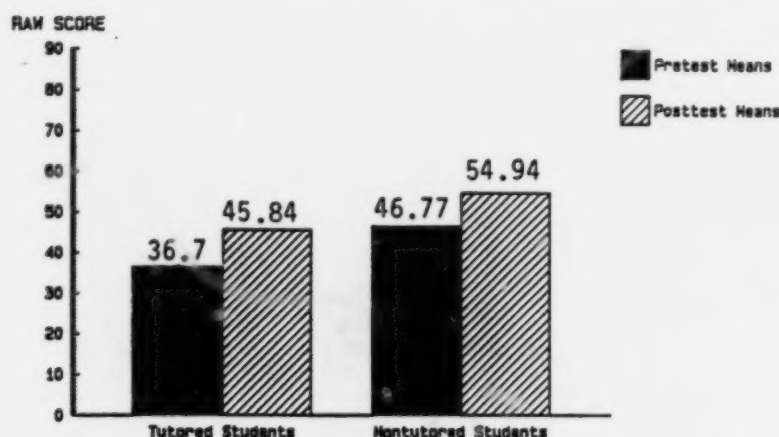


Figure A-2. COMPARISON OF LAB MEAN SCORES FOR TUTORED AND NONTUTORED STUDENTS FOR 1985-86. Gains of tutored students (N=58) exceeded those of nontutored (N=65) by slightly more than one point.

An important consideration is the newness of the program at all schools and the limited time tutoring was provided. It began in October, 1986, at two schools, Murchison and Johnston. During the second semester, tutoring was expanded to Anderson. University of Texas multicultural class students assisted project students at the original schools for a maximum of 5 to 5 1/2 months (allowing for training, finals, and winter/spring vacations). During the first semester tutoring assistance was given between October and mid December; second semester tutoring began the first week in February and ended mid May. The time tutored per LEP student ranged from 5 minutes to 21 1/2 hour.

The fact that the program was new meant teachers had to determine how to use the tutors most effectively. Some changes in teachers and students involved occurred. Subsequently, it is possible that the achievement of Title VII students has not yet been fully impacted.

For a more complete account of the tutor component, see Appendix G.

Information Need 12: Did the project meet its objectives?

By the end of project year 1985-86, 85% of project participants who are in attendance 90% of the time will exhibit gains in scores from pretesting to posttesting using the English Language Assessment Battery. (Objective)

This objective as stated was not met. It should be noted that rather than check percentage attendance, only those present for pre- and posttesting were included. A check last spring showed these students had very high attendance rates. Thus, of the 131 LEP A and B students with pre- and posttest English LAB scores, 109 (83.2%) made gains on the English LAB; 22 did not. To meet the objective, three more students would have needed to show gains.

Discussion

Although very significant overall gains are being made by project students in terms of English language acquisition, the project objective as stated has not been met; it should be noted, however, that if 3 more students had made gains the objective would have been met. It may be that the 85% criterion for meeting the objective is unrealistic in light of the first year implementation of the program. Also, although both the tutored and control groups are making very significant overall group gains, the gains in favor of the tutored group were very modest, slightly more than 1 raw score point which was not statistically significant.

Attachment A-1

LAB Scores: Project Students

Tutored and Not Tutored

(Page 1 of 32)

NOTE: THE JOB EVISASBY HAS BEEN RUN UNDER RELEASE 82.4 OF SAS
AT AUSTIN INDEPENDENT SCHOOL DISTRICT (01986001).

NOTE: CUID VERSION = FF SERIAL = 013553 MODEL = 4341 .

NOTE: NO OPTIONS SPECIFIED.

1						00000140
2	OPTIONS	ERRORS = 0;				00000150
3	TITLE	TITLE VII PROGRAM	SA=BY002	0301;		00000160
4	TITLE2	PRUEBA = FALL 1985	LAB=FALL85	LAB=SPRING 86	BY001 0102;	00000170
5	TITLE3	TUTOT DATA SET			BY001 0105;	00000180
6						00000190
7	DATA	BARBFILL;				00000200
8	INPUT	FILEID	\$ 1-3			00000210
9		STUID	\$ 4-10			00000220
10		STUNAME	\$ 11-30			00000230
11		GRADE	\$ 31-32			00000240
12		SCHOOL	\$ 33-35			00000250
13		READ	36-37			00000260
14		LANG	38-39			00000270
15		MATH	40-41			00000280
16		COMP	42-43			00000290
17		SOCST	44-45			00000300
18		SC	46-47			00000310
19		COMPREH	48-50			00000320
20		VOCAB	51-53			00000330
21		WORKSTU	54-56			00000340
22	257	PREENG	ZD2.			00000350
23	259	POSTENG	ZD2.			00000360
24	261	PRESpan	ZD2.			00000370
25	263	POSTSPAN	ZD2.;			00000380
26		IF SCHOOL = '003'	OR SCHOOL = '009'	OR SCHOOL = '052';		00000390
27		IF PREENG GT 0	AND POSTENG GT 0;			00000400
28		LABGAIN = POSTENG	= PREENG;			00000410
29		KEEP STUID SCHOOL GRADE PREENG POSTENG LABGAIN;				00000420
30		CARDS;				00000430

NOTE: INVALID DATA FOR POSTENG IN LINE 31 59-60. 23:31
NOTE: INVALID DATA FOR POSTSPAN IN LINE 31 63-64. 25:31
NOTE: FURTHER ERRORS OF THIS TYPE WILL NOT BE PRINTED.
OPTIONS ERRORS=NN; * LIMIT REACHED.

RULE: 1234567 101234567 201234567 301234567 401234567 501234567 601234567 701234567 80

31 AVN1330301CASTRO,RAFAEL 12003. 83 90 00000010
FILEID=AVN STUID=1330301 STUNAME=CASTRO,RAFAEL GRADE=12 SCHOOL=003 READ=. LANG=. MATH=. COMP=. SOCST=. SC=. COMPREH=.
VOCAB=. WORKSTU=. PREENG=83 POSTENG=. PRESPAN=90 POSTSPAN=. LABGAIN=. _ERROR_=1 _N_=1
NOTE: DATA SET USER010.BARBFIL1 HAS 122 OBSERVATIONS AND 6 VARIABLES. 198 OBS/TRK.
NOTE: THE DATA STATEMENT USED 7.47 SECONDS AND 330K.

249						00000450
250						00000460
251	PROC	SORT;				00000470
252		BY STUID;				00000480
253						00000490

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM

REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL1 HAS 122 OBSERVATIONS AND 6 VARIABLES. 198 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 15.58 SECONDS AND 292K.

254	DATA BARBFIL2;		00000500
255	INPUT	SCHOOL 1=3	00000510
256		GRADE \$ 5=6	00000520
257		STUID \$ 8=14	00000530
258		STUNAME \$ 16=35	00000540
259		SEMESTER \$ 38	00000550
260	240	TUTREAD 204.2	00000560
261	245	TUTLANG 204.2	00000570
262	250	TUTMATH 204.2	00000580
263	255	TUTSOCST 204.2	00000590
264	260	TUTSCI 204.2;	00000600
265		TUTTOTAL = 0;	00000610
266		TUTTOTAL + TUTREAD;	00000620
267		TUTTOTAL + TUTLANG;	00000630
268		TUTTOTAL + TUTMATH;	00000640
269		TUTTOTAL + TUTSOCST;	00000650
270		TUTTOTAL + TUTSCI;	00000660
271		KEEP STUID TUTTOTAL;	00000670
272		CARDS;	00000680

NOTE: INVALID DATA FOR TUTREAD IN LINE 273 40-43. 260:31

NOTE: INVALID DATA FOR TUTLANG IN LINE 273 45-48. 261:31

NOTE: INVALID DATA FOR TUTMATH IN LINE 273 50-53. 262:31

NOTE: INVALID DATA FOR TUTSOCST IN LINE 273 55-58. 263:31

NOTE: INVALID DATA FOR TUTSCI IN LINE 273 60-63. 264:31

NOTE: FURTHER ERRORS OF THIS TYPE WILL NOT BE PRINTED.

OPTIONS ERRORS=NN; * LIMIT REACHED.

RULE: 1234567 101234567 201234567 301234567 401234567 501234567 601234567 701234567 80

273 3 09 1957321 DELEON MARTA 00000010
 SCHOOL=3 GRADE=09 STUID=1957321 STUNAME=DELEON MARTA SEMESTER= TUTREAD=. TUTLANG=. TUTMATH=. TUTSOCST=. TUTSCI=.
 TUTTOTAL=0 _ERROR_=1 _N_=1
 NOTE: DATA SET USER010.BARBFIL2 HAS 167 OBSERVATIONS AND 2 VARIABLES. 420 OBS/TRK.
 NOTE: THE DATA STATEMENT USED 5.71 SECONDS AND 306K.

440	:	00000700
441		00000710
442	PROC SORT;	00000720
443	BY STUID;	00000730
444		00000740
445		00000750

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM

REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 167 OBSERVATIONS AND 2 VARIABLES. 420 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 11.24 SECONDS AND 292K.

446	DATA BARBFIL1;	00000760
447	MERGE BARBFIL1 (IN = INFIL1)	00000770
448	BARBFIL2;	00000780
449	BY STUID;	00000790

86.25

27

3 SAS LOG VSE SAS 02.4 VSE 3.1 JOB EVISAS8Y 13:09 FRIDAY, DECEMBER 12, 1986

450	IF INFIL1;	00000800
451	TUTGROUP = '0ZERO HOURS';	00000810
452	IF TUTTOTAL GT 0 AND TUTTOTAL LT 2 THEN TUTGROUP = '1GT 0 LT 2';	00000820
453	IF TUTTOTAL GE 2 AND TUTTOTAL LT 8 THEN TUTGROUP = '2GE 2 LT 8';	00000830
454	IF TUTTOTAL GE 8 THEN TUTGROUP = '3GE 8';	00000840
455		00000850
456		00000860

NOTE: DATA SET USER010.BARBFIL1 HAS 123 OBSERVATIONS AND 8 VARIABLES. 134 OBS/TRK.
NOTE: THE DATA STATEMENT USED 4.30 SECONDS AND 306K.

457	PROC FREQ;	00000870
458	TABLES SCHOOL GRADE TUTGROUP;	00000880
459		00000890

86.25

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TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 2
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
PREENG	58	36.6724	12.4201	16.0000	64.0000	1.6308	33.868	22.49	0.0001
POSTENG	58	45.8448	14.4220	21.0000	72.0000	1.8937	31.458	24.21	0.0001
LABGAIN	58	9.1724	9.3286	-13.0000	28.0000	1.2249	101.703	7.49	0.0001

NOTE: THE PROCEDURE MEANS USED 2.35 SECONDS AND 348K AND PRINTED PAGE 2.

469 PROC SORT; 00000990
 470 BY GRADE; 00001000

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.
 THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 58 OBSERVATIONS AND 8 VARIABLES. 134 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 13.02 SECONDS AND 292K.

471 PROC MEANS MAXDEC=4 N MEAN STD MIN MAX STDERR CV T PRT; 00001010
 472 VAR PREENG POSTENG LABGAIN; 00001020
 473 BY GRADE; 00001030
 474 00001040

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TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 3
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
GRADE=07									
PREENG	24	29.6250	10.1245	16.0000	55.0000	2.0667	34.176	14.33	0.0001
POSTENG	24	39.9583	14.7751	21.0000	69.0000	3.0159	36.976	13.25	0.0001
LABGAIN	24	10.3333	8.4115	-9.0000	24.0000	1.7170	81.402	6.02	0.0001
GRADE=08									
PREENG	22	39.5909	10.4410	23.0000	61.0000	2.2260	26.372	17.79	0.0001
POSTENG	22	47.6818	12.9996	29.0000	72.0000	2.7715	27.263	17.20	0.0001
LABGAIN	22	8.0909	8.3888	-6.0000	23.0000	1.7885	103.682	4.52	0.0002
GRADE=09									
PREENG	7	42.1429	13.7771	23.0000	64.0000	5.2073	32.692	8.09	0.0002
POSTENG	7	52.0000	10.8474	39.0000	68.0000	4.0999	20.860	12.68	0.0001
LABGAIN	7	9.8571	11.8944	-11.0000	25.0000	4.4957	120.668	2.19	0.0708
GRADE=10									
PREENG	3	55.6667	8.5049	47.0000	64.0000	4.9103	15.278	11.34	0.0077
POSTENG	3	55.6667	18.9297	34.0000	69.0000	10.9291	34.005	5.09	0.0365
LABGAIN	3	0.0000	13.0000	-13.0000	13.0000	7.5056	.	0.00	1.0000
GRADE=11									
PREENG	1	50.0000	.	50.0000	50.0000	.	.	.	.
POSTENG	1	59.0000	.	59.0000	59.0000	.	.	.	.
LABGAIN	1	9.0000	.	9.0000	9.0000	.	.	.	.
GRADE=12									
PREENG	1	33.0000	.	33.0000	33.0000	.	.	.	.
POSTENG	1	61.0000	.	61.0000	61.0000	.	.	.	.
LABGAIN	1	28.0000	.	28.0000	28.0000	.	.	.	.

NOTE: THE PROCEDURE MEANS USED 2.50 SECONDS AND 348K AND PRINTED PAGE 3.

475 PROC SORT;
 476 BY SCHOOL;

00001050
 00001060

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER10.BARFILL2 HAS 58 OBSERVATIONS AND 8 VARIABLES. 134 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 10.86 SECONDS AND 292K.

STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
SCHOOL=003									
PREENG	7	47.2857	15.0965	23.0000	64.0000	5.7059	31.926	8.29	0.0002
POSTENG	7	53.0000	12.7279	34.0000	66.0000	4.8107	24.015	11.02	0.0001
LABGAIN	7	5.7143	16.1009	-13.0000	28.0000	6.0856	281.765	0.94	0.3840
SCHOOL=009									
PREENG	5	42.8000	10.2811	30.0000	56.0000	4.5978	24.021	5.31	0.0007
POSTENG	5	56.0000	11.5542	45.0000	69.0000	5.1672	20.633	10.84	0.0004
LABGAIN	5	13.2000	4.3818	7.0000	19.0000	1.9596	33.195	6.74	0.0025
SCHOOL=052									
PREENG	46	34.3913	11.3402	16.0000	61.0000	1.6720	32.974	20.57	0.0001
POSTENG	46	43.6522	14.3406	21.0000	72.0000	2.1144	32.852	20.65	0.0001
LABGAIN	46	9.2609	8.3837	-9.0000	24.0000	1.2361	90.528	7.49	0.0001

NOTE: THE PROCEDURE MEANS USED 2.48 SECONDS AND 348K AND PRINTED PAGE 4.

```

481 PROC TABULATE;                                00001110
482 CLASS SCHOOL TUTGROUP;                        00001120
483 VAR PREENG POSTENG LABGAIN;                   00001130
484                                                00001140

484 TABLE SCHOOL ALL, TUTGROUP ALL,              00001140
485 (PREENG POSTENG LABGAIN)*(N*F=7. MEAN*F=7.2); 00001150
486                                                00001160
486 KEYLABEL ALL = 'TOTAL';                       00001160

```

86.25

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TITLE VII PROGRAM
 PRUEBA - FALL 1985 LAB-FALL85
 TUTOT DATA SET

SA-BY002 0301
 LAB-SPRING 86 BY001 0102
 BY001 0105

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86.25

STUDENTS WERE TUTORED

SCHCOL 003

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
2GE 2 LT 8	1	64.00	1	64.00	1	0.00
3GE 8	6	44.50	6	51.17	6	6.67
TOTAL	7	47.29	7	53.00	7	5.71

TITLE VII PROGRAM
 PRUEBA - FALL 1985 LAB-FALL85
 TUTOT DATA SET

SA-BY002 0301
 LAB-SPRING 86

13:09 FRIDAY, DECEMBER 12, 1986
 BY001 0102
 BY001 0105

6

86.25

STUDENTS WERE TUTORED

SCHGOL 009

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	1	49.00	1	68.00	1	19.00
2GE 2 LT 8	1	30.00	1	45.00	1	15.00
3GE 8	3	45.00	3	55.67	3	10.67
TOTAL	5	42.80	5	56.00	5	13.20

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TITLE VII PROGRAM
 PRUEBA - FALL 1985 LAB-FALL85
 TUTOT DATA SET

SA-BY002 0301
 LAB-SPRING 86 BY001 0102
 BY001 0105

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86.25

STUDENTS WERE TUTORED

SCHCOL 052

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	24	38.08	24	47.38	24	9.29
2GE 2 LT 8	17	28.59	17	36.29	17	7.71
3GE 8	5	36.40	5	50.80	5	14.40
TOTAL	46	34.39	46	43.65	46	9.26

TITLE VII PROGRAM
PRUEBA - FALL 1985 LAB-FALL85
TUTOT DATA SET

SA-BY002 0301
LAB-SPRING 86 BY001 0102
BY001 0105

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86.25

STUDENTS WERE TUTORED

TOTAL

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	25	38.52	25	48.20	25	9.68
2GE 2 LT 8	19	30.53	19	38.21	19	7.68
3GE 8	14	41.71	14	52.00	14	10.29
TOTAL	58	36.67	58	45.84	58	9.17

NOTE: THE PROCEDURE TABULATE USED 4.80 SECONDS AND 590K AND PRINTED PAGES 5 TO 8.

```
487 PROC TABULATE;
488 CLASS GRADE TUTGROUP;
489 VAR PREENG POSTENG LABGAIN;
490
490 TABLE GRADE ALL, TUTGROUP ALL,
491 (PREENG POSTENG LABGAIN)*(N*F=7. MEAN*F=7.2);
492
492 KEYLABEL ALL = 'TOTAL';
493
494
```

```
00001170
00001180
00001190
00001200
00001200
00001210
00001220
00001220
00001230
00001240
```

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 9
 PRUEBA - FALL 1985 LAB-FALL 85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

GRADE 07

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	11	34.82	11	49.18	11	14.36
2GE 2 LT 8	10	24.40	10	30.60	10	6.20
3GE 8	3	28.00	3	37.33	3	9.33
TOTAL	24	29.63	24	39.96	24	10.33

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TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 10
 PRUEBA - FALL 1985 LAB-FALL 85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

GRACE 08

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	13	40.85	13	45.85	13	5.00
2GE 2 LT 8	7	34.57	7	44.43	7	9.86
3GE 8	2	49.00	2	71.00	2	22.00
TOTAL	22	39.59	22	47.68	22	8.09

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TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 11
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

GRADE 09

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	1	49.00	1	68.00	1	19.00
2GE 2 LT 8	1	30.00	1	45.00	1	15.00
3GE 8	5	43.20	5	50.20	5	7.00
TOTAL	7	42.14	7	52.00	7	9.86

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 12
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

GRACE 10

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
2GE 2 LT 8	1	64.00	1	64.00	1	0.00
3GE 8	2	51.50	2	51.50	2	0.00
TOTAL	3	55.67	3	55.67	3	0.00

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 13
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

86.25

STUDENTS WERE TUTORED

GRADE 11

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
JGE 8	11	50.00	11	59.00	11	9.00
TOTAL	11	50.00	11	59.00	11	9.00

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TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 14
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

GRADE 12

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
3GE 8	1	33.00	1	61.00	1	28.00
TOTAL	1	33.00	1	61.00	1	28.00

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 15
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE TUTORED

TOTAL	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
1GT 0 LT 2	25	38.52	25	48.20	25	9.68
2GE 2 LT 8	19	30.53	19	38.21	19	7.68
3GE 8	14	41.71	14	52.00	14	10.29
TOTAL	58	36.67	58	45.84	58	9.17

NOTE: THE PROCEDURE TABULATE USED 6.05 SECONDS AND 592K AND PRINTED PAGES 9 TO 15.

```

495 DATA BARBFIL2;                                00001250
496 SET BARBFIL1;                                00001260
497 IF TUTGROUP = '0ZERO HOURS';                 00001270
498 TITLE4 ' ';                                00001280
499 TITLES STUDENTS WERE NOT TUTORED;             00001290
500                                              00001300

```

NOTE: DATA SET USER010.BARBFIL2 HAS 65 OBSERVATIONS AND 8 VARIABLES. 134 OBS/TRK.
 NOTE: THE DATA STATEMENT USED 2.87 SECONDS AND 306K.

```

501 PROC MEANS MAXDEC=4 N MEAN STD MIN MAX STDERR CV T PRT; 00001310
502 VAR PREENG POSTENG LABGAIN;                      00001320
503                                              00001330

```

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 16
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
PREENG	65	46.7692	15.9548	21.0000	73.0000	1.9789	34.114	23.63	0.0001
POSTENG	65	54.9385	15.5532	24.0000	82.0000	1.9291	28.310	28.48	0.0001
LABGAIN	65	8.1692	8.9854	-22.0000	30.0000	1.1145	109.990	7.33	0.0001

NOTE: THE PROCEDURE MEANS USED 5.37 SECONDS AND 348K AND PRINTED PAGE 16.

504 PROC SORT; 00001340
 505 BY GRADE; 00001350

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.
 THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 65 OBSERVATIONS AND 8 VARIABLES. 134 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 10.98 SECONDS AND 292K.

506 PROC MEANS MAXDEC=4 N MEAN STD MIN MAX STDERR CV T PRT; 00001360
 507 VAR PREENG POSTENG LABGAIN; 00001370

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 17
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
GRADE=07									
PREENG	18	39.2778	15.8849	21.0000	68.0000	3.7441	40.442	10.49	0.0001
POSTENG	18	45.9444	15.3947	24.0000	78.0000	3.6286	33.507	12.66	0.0001
LABGAIN	18	6.6667	9.2609	-22.0000	21.0000	2.1828	138.914	3.05	0.0072
GRADE=08									
PREENG	39	48.6154	14.6514	23.0000	73.0000	2.3461	30.137	20.72	0.0001
POSTENG	39	56.9231	14.0082	26.0000	82.0000	2.2431	24.609	25.38	0.0001
LABGAIN	39	8.3077	9.0267	-13.0000	30.0000	1.4454	108.655	5.75	0.0001
GRADE=09									
PREENG	2	45.0000	29.6985	24.0000	66.0000	21.0000	65.997	2.14	0.2780
POSTENG	2	61.0000	21.2132	46.0000	76.0000	15.0000	34.776	4.07	0.1535
LABGAIN	2	16.0000	8.4853	10.0000	22.0000	6.0000	53.033	2.67	0.2284
GRADE=10									
PREENG	3	52.3333	21.1266	28.0000	66.0000	12.1974	40.369	4.29	0.0503
POSTENG	3	58.6667	16.5025	42.0000	75.0000	9.5277	28.129	6.16	0.0254
LABGAIN	3	6.3333	11.5902	-7.0000	14.0000	6.6916	183.004	0.95	0.4438
GRADE=11									
PREENG	2	64.0000	1.4142	63.0000	65.0000	1.0000	2.210	64.00	0.0099
POSTENG	2	74.5000	4.9497	71.0000	78.0000	3.5000	6.644	21.29	0.0299
LABGAIN	2	10.5000	6.3640	6.0000	15.0000	4.5000	60.609	2.33	0.2578
GRADE=12									
PREENG	1	62.0000	.	62.0000	62.0000	.	.	.	.
POSTENG	1	77.0000	.	77.0000	77.0000	.	.	.	.
LABGAIN	1	15.0000	.	15.0000	15.0000	.	.	.	.

NOTE: THE PROCEDURE MEANS USED 2.06 SECONDS AND 348K AND PRINTED PAGE 17.

510 PROC SORT; 00001400
 511 BY SCHOOL; 00001410

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.
 THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 65 OBSERVATIONS AND 8 VARIABLES. 134 OBS/TRK.
 NOTE: THE PROCEDURE SORT USED 13.64 SECONDS AND 292K.

512 PROC MEANS MAXDEC=4 N MEAN STD MIN MAX STDERR CV T PRT; 00001420
 513 VAR PREENG POSTENG LABGAIN; 00001430
 514 BY SCHOOL; 00001440
 515 00001450

86.25

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TITLE VII PROGRAM
PRUEBA - FALL 1985 LAB-FALL85
TUTOT DATA SET

SA-BY002 0301
LAB-SPRING 86

13:09 FRIDAY, DECEMBER 12, 1986 18
BY001 0102
BY001 0105

STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
SCHOOL=003									
PREENG	5	64.6000	1.5166	63.0000	66.0000	0.6782	2.348	95.25	0.0001
POSTENG	5	71.8000	7.5961	59.0000	78.0000	3.3971	10.579	21.14	0.0001
LABGAIN	5	7.2000	8.5849	-7.0000	15.0000	3.8393	119.234	1.88	0.1340
SCHOOL=009									
PREENG	3	38.0000	20.8806	24.0000	62.0000	12.0554	54.949	3.15	0.0876
POSTENG	3	55.0000	19.1572	42.0000	77.0000	11.0604	34.831	4.97	0.0381
LABGAIN	3	17.0000	4.3589	14.0000	22.0000	2.5166	25.641	6.76	0.0212
SCHOOL=052									
PREENG	57	45.6667	15.5384	21.0000	73.0000	2.0581	34.026	22.19	0.0001
POSTENG	57	53.4561	15.2187	24.0000	82.0000	2.0158	28.470	26.52	0.0001
LABGAIN	57	7.7895	9.0509	-22.0000	30.0000	1.1988	116.194	6.50	0.0001
NOTE: THE PROCEDURE MEANS USED 1.92 SECONDS AND 348K AND PRINTED PAGE 18.									

```

516      PROC TABULATE;                                00001460
517      CLASS SCHOOL TUTGROUP;                          00001470
518      VAR PREENG POSTENG LABGAIN;                      00001480
519                                          00001490

519      TABLE SCHOOL ALL, TUTGROUP ALL,                00001490
520              (PREENG POSTENG LABGAIN)*(N*F=7. MEAN*F=7.2); 00001500
521                                          00001510
521      KEYLABEL ALL = 'TOTAL';                          00001510

```

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 19
 PRUEBA - FALL 1985 LAB-FALL 85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

SCHOOL 003

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
OZERO HOURS	5	64.60	5	71.80	5	7.20
TOTAL	5	64.60	5	71.80	5	7.20

APPENDIX A
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86.25

65

TITLE VII PROGRAM 5A-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 20
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

SCHOOL 009

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	3	38.00	3	55.00	3	17.00
TOTAL	3	38.00	3	55.00	3	17.00

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 21
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

86.25

STUDENTS WERE NOT TUTORED

SCHCOL 052

	PREENG		POSTENG		LABGAIN *	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	57	45.67	57	53.46	57	7.79
TOTAL	57	45.67	57	53.46	57	7.79

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 22.25
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

TOTAL	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
	TUTGROUP					
OZERO HOURS	65	46.77	65	54.94	65	8.17
TOTAL	65	46.77	65	54.94	65	8.17

NOTE: THE PROCEDURE TABULATE USED 4.81 SECONDS AND 590K AND PRINTED PAGES 19 TO 22.

```

522 PROC TABULATE;                                00001520
523 CLASS GRADE TUTGROUP;                          00001530
524 VAR PREENG POSTENG LABGAIN;                     00001540
525                                                  00001550

525 TABLE GRADE ALL, TUTGROUP ALL,                00001550
526          (PREENG POSTENG LABGAIN)*(N*F=7. MEAN*F=7.2); 00001560
527                                                  00001570
527 KEYLABEL ALL = 'TOTAL';                         00001570
528                                                  00001580

```


TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 23
 PRUEBA - FALL 1985 LAB-FALL 85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

GRADE 07

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	18	39.28	18	45.94	18	6.67
TOTAL	18	39.28	18	45.94	18	6.67

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 24
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

GRADE 08

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
OZERO HOURS	39	48.62	39	56.92	39	8.31
TOTAL	39	48.62	39	56.92	39	8.31

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 25
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

GRADE 09

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	2	45.00	2	61.00	2	16.00
TOTAL	2	45.00	2	61.00	2	16.00

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 26
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

GRADE 10

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	3	52.33	3	58.67	3	6.33
TOTAL	3	52.33	3	58.67	3	6.33

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 27
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

GRADE 11

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	2	64.00	2	74.50	2	10.50
TOTAL	2	64.00	2	74.50	2	10.50

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 28
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

GRADE 12

	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
TUTGROUP						
0ZERO HOURS	1	62.00	1	77.00	1	15.00
TOTAL	1	62.00	1	77.00	1	15.00

TITLE VII PROGRAM SA-BY002 0301 13:09 FRIDAY, DECEMBER 12, 1986 29
 PRUEBA - FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105

STUDENTS WERE NOT TUTORED

TOTAL	PREENG		POSTENG		LABGAIN	
	N	MEAN	N	MEAN	N	MEAN
	TUTGROUP					
OZERO HOURS	65	46.77	65	54.94	65	8.17
TOTAL	65	46.77	65	54.94	65	8.17

NOTE: THE PROCEDURE TABULATE USED 5.69 SECONDS AND 590K AND PRINTED PAGES 23 TO 29.

529 PROC DELETE DATA = BARBFIL1 BARBFIL2;

00001590

NOTE: THE PROCEDURE DELETE USED 2.02 SECONDS AND 284K.

NOTE: SAS USED 592K MEMORY.

NOTE: SAS INSTITUTE INC.
 SAS CIRCLE
 PO BOX 8000
 CARY, N.C. 27511-8000

Attachment A-2
Regression Analyses
Tutored vs. Nontutored Gains
Appendix A
(Page 1 of 13)

NOTE: THE JOB EVISASBY HAS BEEN RUN UNDER RELEASE 82.4 OF SAS
AT AUSTIN INDEPENDENT SCHOOL DISTRICT (01986001).

NOTE: CPUID VERSION = FF SERIAL = 013553 MODEL = 4341 .

NOTE: NO OPTIONS SPECIFIED.

1				00000140
2	OPTIONS	ERRORS = 0;		00000150
3	TITLE	TITLE VII PROGRAM	SA=BY002 0501;	00000160
4	TITLE2	PRUEBA = FALL 1985	LAB=FALL85 LAB=SPRING 86 BY001 0102;	00000170
5	TITLE3	TUTOT DATA SET	BY001 0105;	00000180
6	TITLE4	GROUP 1 = NON-TUTORED	GROUP 2 = TUTORED;	00000190
7				00000200
8	DATA	BARBFIL1;		00000210
9	INPUT	FILEID	\$ 1-3	00000220
10		STUID	\$ 4-10	00000230
11		STUNAME	\$ 11-30	00000240
12		GRADE	\$ 31-32	00000250
13		SCHOOL	\$ 33-35	00000260
14		READ	36-37	00000270
15		LANG	38-39	00000280
16		MATH	40-41	00000290
17		COMP	42-43	00000300
18		SOCST	44-45	00000310
19		SC	46-47	00000320
20		COMPREH	48-50	00000330
21		VOCAB	51-53	00000340
22		WORKSTU	54-56	00000350
23	257	PREENG	ZD2.	00000360
24	259	POSTENG	ZD2.	00000370
25	261	PRESpan	ZD2.	00000380
26	263	POSTSPAN	ZD2.;	00000390
27		IF PREENG GT 0 AND POSTENG GT 0;		00000400
28		LABGAIN = POSTENG - PREENG;		00000410
29		KEEP STUID SCHOOL GRADE PREENG POSTENG LABGAIN;		00000420
30		CARDS;		00000430

NOTE: INVALID DATA FOR PCSTENG IN LINE 31 59-60. 24:31
NOTE: INVALID DATA FOR POSTSPAN IN LINE 31 63-64. 26:31
NOTE: FURTHER ERRORS OF THIS TYPE WILL NOT BE PRINTED.
OPTIONS ERRORS=NN; * LIMIT REACHED.

RULE: 1234567 101234567 201234567 301234567 401234567 501234567 601234567 701234567 80

31 AVW1330301CASTRO,RAFAEL 12003. 83 90 00000010
FILEID=AVW STUID=1330301 STUNAME=CASTRO,RAFAEL GRADE=12 SCHOOL=003 READ=. LANG=. MATH=. COMP=. SOCST=. SC=. COMPREH=.
VOCAB=. WORKSTU=. PREENG=83 POSTENG=. PRESPAN=90 POSTSPAN=. LABGAIN=. _ERROR_1 _N_=1
NOTE: DATA SET USER010.BARBFIL1 HAS 159 OBSERVATIONS AND 6 VARIABLES. 198 OBS/TRK.
NOTE: THE DATA STATEMENT USED 9.28 SECONDS AND 344K.

249	:		00000450
250			00000460
251	PROC SORT;		00000470
252	BY STUID;		00000480
253			00000490

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM

REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL1 HAS 159 OBSERVATIONS AND 6 VARIABLES. 198 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 17.17 SECONDS AND 344K.

254	DATA BARBFIL2;			00000500
255	INPUT	SCHOOL	1=3	00000510
256		GRADE	\$ 5=6	00000520
257		STUID	\$ 8=14	00000530
258		STUNAME	\$ 16=35	00000540
259		SEMESTER	\$ 38	00000550
260	040	TUTREAD	ZD4.2	00000560
261	045	TUTLANG	ZD4.2	00000570
262	050	TUTMATH	ZD4.2	00000580
263	055	TUTSOCST	ZD4.2	00000590
264	060	TUTSCI	ZD4.2;	00000600
265	TUTTtotal = 0;			00000610
266	TUTTtotal + TUTREAD;			00000620
267	TUTTtotal + TUTLANG;			00000630
268	TUTTtotal + TUTMATH;			00000640
269	TUTTtotal + TUTSOCST;			00000650
270	TUTTtotal + TUTSCI;			00000660
271	GROUP = '1';			00000670
272	IF TUTTtotal GT 0 THEN GROUP = '2';			00000680
273	KEEP STUID TUTTtotal GROUP;			00000690
274	CARDS;			00000700

NOTE: INVALID DATA FOR TUTREAD IN LINE 275 40-43. 260:31
 NOTE: INVALID DATA FOR TUTLANG IN LINE 275 45-48. 261:31
 NOTE: INVALID DATA FOR TUTMATH IN LINE 275 50-53. 262:31
 NOTE: INVALID DATA FOR TUTSOCST IN LINE 275 55-58. 263:31
 NOTE: INVALID DATA FOR TUTSCI IN LINE 275 60-63. 264:31
 NOTE: FURTHER ERRORS OF THIS TYPE WILL NOT BE PRINTED.
 OPTIONS ERRORS=NN; * LIMIT REACHED.

RULE: 1234567 101234567 201234567 301234567 401234567 501234567 601234567 701234567 80

275 003 09 1957321 DELEON MARTA 00000010
 SCHOOL=3 GRADE=09 STUID=1957321 STUNAME=DELEON MARTA SEMESTER= TUTREAD=. TUTLANG=. TUTMATH=. TUTSOCST=. TUTSCI=.
 TUTTtotal=0 GROUP=1 _ERROR_=1 _N_=1
 NOTE: DATA SET USER010.BARBFIL2 HAS 168 OBSERVATIONS AND 3 VARIABLES. 398 OBS/TRK.
 NOTE: THE DATA STATEMENT USED 5.15 SECONDS AND 336K.

443	:	00000720
444		00000730
445	PROC SORT;	00000740
446	BY STUID;	00000750
447		00000760
448		00000770

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 168 OBSERVATIONS AND 3 VARIABLES. 398 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 19.33 SECONDS AND 342K.

449	DATA BARBFIL1;	00000780
450	INFIL1 = 0;	00000790

```

451      MERGE BARBFIL1 (IN = INFIL1)
452          BARBFIL2;
453      BY STUID;
454      IF INFIL1;
455      IF GROUP = . THEN GROUP = '1';
456      IF TUTTOTAL = . THEN TUTTOTAL = 0;
457

```

```

00000800
00000810
00000820
00000830
00000831
00000832
00000840

```

NOTE: CHARACTER VALUES HAVE BEEN CONVERTED TO NUMERIC
VALUES AT THE PLACES GIVEN BY: (LINE):(COLUMN).

455:8

NOTE: DATA SET USER010.BARBFIL1 HAS 159 OBSERVATIONS AND 8 VARIABLES. 162 OBS/TRK.
NOTE: THE DATA STATEMENT USED 4.76 SECONDS AND 334K.

```

458      PROC SORT;
459          BY GROUP;
460

```

```

00000841
00000842
00000850

```

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
REQUIRED BY YOUR SYSTEM SORT UTILITY.
THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL1 HAS 159 OBSERVATIONS AND 8 VARIABLES. 162 OBS/TRK.
NOTE: THE PROCEDURE SORT USED 20.11 SECONDS AND 342K.

```

461      PROC FREQ;
462          TABLES SCHOOL GRADE GROUP TUTTOTAL;
463

```

```

00000860
00000870
00000880

```

NOTE: SEE-----FOR TABLE LOCATION IN PRINT FILE

APPENDIX A
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483	V2=PRETEST;	00001080
484	V8=0;	00001090
485	V9=0;	00001100
486	IF GROUP EQ 1 THEN V8=1;	00001110
487	IF GROUP EQ 2 THEN V9=1;	00001120
488	V3=V2*V8;	00001130
489	V4=V2*V9;	00001140
490	V5=V2**2;	00001150
491	V6=V5*V8;	00001160
492	V7=V5*V9;	00001170
493	*****	00001180
494	FOLLOWING ARE REGRESSION STATEMENTS FOR TWO-GROUP SORESPOT	00001190
495	*****;	00001200
496		00001210

NOTE: CHARACTER VALUES HAVE BEEN CONVERTED TO NUMERIC
VALUES AT THE PLACES GIVEN BY: (LINE):(COLUMN).

486:7 487:7

NOTE: DATA SET USERD10.BARBFIL1 HAS 159 OBSERVATIONS AND 19 VARIABLES. 58 OBS/TRK.
NOTE: THE DATA STATEMENT USED 4.66 SECONDS AND 334K.

496	PROC GLM;	00001210
497	MODEL V1=V3 V4 V6 V7 V8;	00001220
498		00001230

Handwritten notes:
 Model
 V1=V3
 V4
 V6
 V7
 V8
 1/19/77



TITLE VII PROGRAM SA-BY002 0501 15:03 TUESDAY, FEBRUARY 10, 1987 6
 PRUEBA = FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105
 GROUP 1 = NON-TUTORED GROUP 2 = TUTORED

***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	5	22209.12416856	4441.82483371	49.83	0.0001	0.619532	18.2986
ERROR	153	13639.11482515	89.14454134				V1 MEAN
CORRECTED TOTAL	158	35848.23899371			9.44163870		51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V3	1	8654.40598560	97.08	0.0001	1	2.48429678	0.03	0.8676
V4	1	12973.14340197	145.53	0.0001	1	408.92322272	4.59	0.0338
V6	1	4.33771056	0.05	0.8257	1	415.11239557	4.66	0.0325
V7	1	178.76041614	2.01	0.1588	1	45.95642402	0.52	0.4739
V8	1	398.47665428	4.47	0.0361	1	398.47665428	4.47	0.0361

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	7.49369350	0.67	0.5019	11.13197682
V3	-0.06347165	-0.17	0.8676	0.38021165
V4	1.26983621	2.14	0.0338	0.59289010
V6	0.00917188	2.16	0.0325	0.00425033
V7	-0.00525153	-0.72	0.4739	0.00731409
V8	28.85077698	2.11	0.0361	13.64593976

NOTE: THE PROCEDURE GLM USED 7.62 SECONDS AND 718K AND PRINTED PAGE 6.

498	PROC GLM;	00001230
499	MODEL V1=V3 V4 V5 V8;	00001240
500		00001250

***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	4	21949.97311148	5487.49327787	60.80	0.0001	0.612303	18.4116
ERROR	154	13898.26588223	90.24847975		ROOT MSE		V1 MEAN
CORRECTED TOTAL	158	35848.23899371			9.49991999		51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V3	1	8654.40598560	95.90	0.0001	1	54.26921613	0.60	0.4393
V4	1	12973.14340197	143.75	0.0001	1	154.76868227	1.71	0.1923
V5	1	134.50573896	1.49	0.2240	1	201.91776251	2.24	0.1368
V8	1	187.91798495	2.08	0.1511	1	187.91798495	2.08	0.1511

PARAMETER	ESTIMATE	T FOR HO: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	22.94952831	3.53	0.0005	6.50118205
V3	0.25769249	0.78	0.4393	0.33231116
V4	0.40688983	1.31	0.1923	0.31071001
V5	0.00553075	1.50	0.1368	0.00369757
V8	7.15385162	1.44	0.1511	4.95764816

NOTE: THE PROCEDURE GLM USED 9.38 SECONDS AND 718K AND PRINTED PAGE 7.

500 PROC GLM;
 501 MODEL V1=V2 V5 V8;
 502

00001250
 00001260
 00001270

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86.25



TITLE VII PROGRAM SA-BY002 0501 15:03 TUESDAY, FEBRUARY 10, 1987 8
 PRUEBA = FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105
 GROUP 1 = NON-TUTORED GROUP 2 = TUTORED

***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	3	21805.86250387	7268.62083462	80.23	0.0001	0.608283	18.4470
ERROR	155	14042.37648984	90.59597735			ROOT MSE	V1 MEAN
CORRECTED TOTAL	158	35848.23899371			9.51819192		51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V2	1	21600.77899504	238.43	0.0001	1	154.56484062	1.71	0.1934
V5	1	152.46126617	1.68	0.1965	1	132.74580267	1.47	0.2279
V8	1	52.62224266	0.58	0.4471	1	52.62224266	0.58	0.4471

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	24.84958041	3.92	0.0001	6.33707636
V2	0.40662170	1.31	0.1934	0.31130755
V5	0.00433513	1.21	0.2279	0.00358134
V8	1.22768276	0.76	0.4471	1.61085311

NOTE: THE PROCEDURE GLM USED 11.84 SECONDS AND 718K AND PRINTED PAGE 8.

502	PROC GLM;	00001270
503	MODEL V1=V2 V5;	00001280
504		00001290

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***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	2	21753.24026121	10876.62013061	120.38	0.0001	0.606815	18.4222
ERROR	156	14094.99873250	90.35255598				V1 MEAN
CORRECTED TOTAL	158	35848.23899371			9.50539615		51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V2	1	21600.77899504	239.07	0.0001	1	144.56290892	1.60	0.2078
V5	1	152.46126617	1.69	0.1959	1	152.46126617	1.69	0.1959

PARAMETER	ESTIMATE	T FOR HO: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	25.61971637	4.10	0.0001	6.24758069
V2	0.39255346	1.26	0.2078	0.31034203
V5	0.00462046	1.30	0.1959	0.00355693

NOTE: THE PROCEDURE GLM USED 7.86 SECONDS AND 718K AND PRINTED PAGE 9.

504 PROC GLM; 00001290



S S A S L O G VSE SAS 82.4 VSE 3.1 JOB EVISASBY

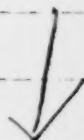
15:03 TUESDAY, FEBRUARY 10, 1987

505 MODEL V1-V3 V4 V8;
506

00001300
00001310

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***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	3	21748.05534897	7249.35178299	79.69	0.0001	0.606670	18.4849
ERROR	155	14100.18364474	90.96892674			ROOT MSE	V1 MEAN
CORRECTED TOTAL	158	35848.23899371			9.53776319		51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V3	1	8654.40598560	95.14	0.0001	1	12350.31125193	135.76	0.0001
V4	1	12973.14340197	142.61	0.0001	1	7264.67454131	79.86	0.0001
V8	1	120.50596140	1.32	0.2515	1	120.50596140	1.32	0.2515

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	15.02148746	3.97	0.0001	3.77962558
V3	0.74552998	11.65	0.0001	0.06398419
V4	0.84953652	8.94	0.0001	0.09506497
V8	5.60188648	1.15	0.2515	4.86717065

NOTE: THE PROCEDURE GLM USED 9.65 SECONDS AND 718K AND PRINTED PAGE 10.

506 PROC GLM; 00001310
 507 MODEL V1=V2 V8; 00001320
 508 00001330



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TITLE VII PROGRAM SA=BY002 0501 15:03 TUESDAY, FEBRUARY 10, 1987 11
 PRUEBA = FALL 1985 LAB=FALL85 LAB=SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105
 GROUP 1 = NON-TUTORED GROUP 2 = TUTORED

***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	2	21673.11670120	10836.55835060	119.26	0.0001	0.604580	18.4745
ERROR	156	14175.12229252	90.86616854				
CORRECTED TOTAL	158	35848.23899371					
					ROOT MSE		V1 MEAN
					9.53237476		51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V2	1	21600.77899504	237.72	0.0001	1	19540.04714546	215.04	0.0001
V8	1	72.33770615	0.80	0.3736	1	72.33770615	0.80	0.3736

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	17.71729153	7.58	0.0001	2.33612126
V2	0.77795628	14.66	0.0001	0.05305099
V8	1.43152112	0.89	0.3736	1.60441422

NOTE: THE PROCEDURE GLM USED 7.23 SECONDS AND 718K AND PRINTED PAGE 11.

508	PROC GLM;	00001330
509	MODEL V1=V2;	00001340
510		00001350

TITLE VII PROGRAM SA-BY002 0501 15:03 TUESDAY, FEBRUARY 10, 1987 12
 PRUEBA = FALL 1985 LAB-FALL85 LAB-SPRING 86 BY001 0102
 TUTOT DATA SET BY001 0105
 GROUP 1 = NON-TUTORED GROUP 2 = TUTORED

***** ENGLISH LAB IN FALL 1985 AND SPRING 1986 *****

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: V1

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	21600.77899504	21600.77899504	238.03	0.0001	0.602562	18.4625
ERROR	157	14247.45999867	90.74815286			ROOT MSE	V1 MEAN
CORRECTED TOTAL	158	35848.23899371				9.52618249	51.59748428

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
V2	1	21600.77899504	238.03	0.0001	1	21600.77899504	238.03	0.0001

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	18.07179118	7.86	0.0001	2.30059135
V2	0.79018458	15.43	0.0001	0.05121684

NOTE: THE PROCEDURE GLM USED 6.80 SECONDS AND 718K AND PRINTED PAGE 12.

511 PROC DELETE DATA = BARBFIL1 BARBFIL2;

00001360

NOTE: THE PROCEDURE DELETE USED 2.66 SECONDS AND 334K.

NOTE: SAS USED 718K MEMORY.

NOTE: SAS INSTITUTE INC.
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APPENDIX A
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NOTE: THE JOB EVISAS HAS BEEN RUN UNDER RELEASE 82.4 OF SAS
AT AUSTIN INDEPENDENT SCHOOL DISTRICT (01986001).

NOTE: CPUID VERSION = FF SERIAL = 013553 MODEL = 4341 .

NOTE: NO OPTIONS SPECIFIED.

1		00000070
2	*****THIS IS FOR 2-GROUP SURESPOT. SEE SA-PS010 0301 FOR 3-GROUP*****;	00000080
3		00000090
4	TITLE1 AUSTIN INDEPENDENT SCHOOL DISTRICT	RETENTION; 00000100
5	TITLE2 OFFICE OF RESEARCH AND EVALUATION	SA-JF065 0601 X; 00000110
6	TITLE3 ' ';	00000120
7	TITLE4 F CALCULATED FROM R SQUARES	X; 00000130
8	TITLE5 ' ';	00000140
9		00000150
10	DATA SPOT;	00000160
11	INPUT GRADE 1-2 TEST 3 3 (RSQ1-RSQ7) (6.6) N 46-49;	00000170
12		00000180
13	CARDS;	00000190

NOTE: DATA SET USER010.SPOT HAS 1 OBSERVATIONS AND 10 VARIABLES. 102 OBS/TRK.
NOTE: THE DATA STATEMENT USED 2.30 SECONDS AND 322K.

15	:	00000220
16		00000230
17	DATA SPOT;	00000240
18	SET SPOT;	00000250
19		00000260
20	IF TEST EQ '1' THEN TEST='READING';	00000270
21	IF TEST EQ '2' THEN TEST='LANGUAGE';	00000280
22	IF TEST EQ '3' THEN TEST='MATH';	00000290
23		00000300
24	F15=((RSQ1-RSQ5)/2)/((1-RSQ1)/(N-6));	00000310
25	F12=((RSQ1-RSQ2)/1)/((1-RSQ1)/(N-6));	00000320
26	F23=((RSQ2-RSQ3)/1)/((1-RSQ2)/(N-5));	00000330
27	F13=((RSQ1-RSQ3)/2)/((1-RSQ1)/(N-6));	00000340
28	F34=((RSQ3-RSQ4)/1)/((1-RSQ3)/(N-4));	00000350
29	F56=((RSQ5-RSQ6)/1)/((1-RSQ5)/(N-4));	00000360
30	F67=((RSQ6-RSQ7)/1)/((1-RSQ6)/(N-3));	00000370
31		00000380
32		00000390

NOTE: DATA SET USER010.SPOT HAS 1 OBSERVATIONS AND 17 VARIABLES. 60 OBS/TRK.
NOTE: THE DATA STATEMENT USED 3.49 SECONDS AND 306K.

32	PROC SORT;	00000390
33		00000400
34	BY GRADE TEST;	00000410
35		00000420
36		00000430

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
REQUIRED BY YOUR SYSTEM SORT UTILITY.
THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.SPOT HAS 1 OBSERVATIONS AND 17 VARIABLES. 60 OBS/TRK.
NOTE: THE PROCEDURE SORT USED 21.74 SECONDS AND 292K.

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36 PROC PRINT;
37 BY GRADE TEST;
38
39 *****
40 DEGREES OF FREEDOM ASSOCIATED WITH F (1 VS. 5) ARE 2,N=6 00000430
41 (1 VS. 2) 1,N=6 00000440
42 (2 VS. 3) 1,N=5 00000450
43 (1 VS. 3) 2,N=6 00000460
44 (3 VS. 4) 1,N=4 00000470
45 (5 VS. 6) 1,N=4 00000480
46 (6 VS. 7) 1,N=3 00000490
47 *****; 00000500
48 00000510
49 00000520
00000530
00000540
00000550
00000560

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APPENDIX A
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AUSTIN INDEPENDENT SCHOOL DISTRICT
OFFICE OF RESEARCH AND EVALUATION

F CALCULATED FROM R SQUARES

RETENTION
SA-JF065 0601 X

9:07 WEDNESDAY, FEBRUARY 11, 1987

X

86.25

GRADE=0 TEST=R								
GBS	RSQ1	RSQ2	RSQ3	RSQ4	RSQ5	RSQ6	RSQ7	
1	0.619532	0.612303	0.608283	0.606815	0.60667	0.60458	0.602562	
GBS	N	F15	F12	F23	F13	F34	F56	F67
1	159	2.58614	2.90704	1.59681	2.26182	0.580879	0.823609	0.796136

NOTE: THE PROCEDURE PRINT USED 2.53 SECONDS AND 356K AND PRINTED PAGE 1.

49 PROC DELETE DATA=SPOT;

00000560

50

00000570

NOTE: THE PROCEDURE DELETE USED 1.23 SECONDS AND 284K.

NOTE: SAS USED 356K MEMORY.

NOTE: SAS INSTITUTE INC.
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Attachment A-3
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Title VII Program

IOWA TESTS OF BASIC SKILLS (ITBS)/
TESTS OF ACHIEVEMENT AND PROFICIENCY (TAP)

Appendix B

IOWA TESTS OF BASIC SKILLS (ITBS)/ TESTS OF ACHIEVEMENT AND PROFICIENCY (TAP)

Purpose

The Iowa Tests of Basic Skills (ITBS) and the Tests of Achievement and Proficiency (TAP), Reading, Mathematics, and Language totals provided information concerning:

Decision Question D1: Should the Title VII program be continued as it is, modified, or discontinued?

Evaluation Question D1-2. What achievement gains were made by project participants in:

- a) Reading?
- b) Mathematics?
- c) Language?

Evaluation Question D1-5. How do the English proficiency and achievement gains of students receiving tutoring compare to students who were not tutored? (Johnston experimental versus control group; Murchison experimental versus control group).

Information Need I2. Did the project meet its objectives?

Procedure

The ITBS is administered to all AISD students, grades K-8, while its continuation, the TAP, is given to students, grades 9-12. Both are administered as part of the regular districtwide testing program in April and May of each year. All project LEP A&B students are required to attempt the ITBS/TAP. However, if it is obvious they cannot handle the level of English proficiency required on the first test, the students are permitted to discontinue. This is based on teacher judgement that the student would be unable to answer one out of four items correctly. A separate decision is made for each subsequent subtest as a student who may not be able to take a reading comprehension test may be able to do reasonably well on a mathematics computation test. Subtests with an insufficient number of responses are automatically discounted when machine scored. A project student may also not be tested if that student was absent during the regular and make-up sessions of the the districtwide testing.

All tests were administered by classroom teachers. All scoring was handled by the Office of Research and Evaluation (ORE).

The programmer analyst created the Title VII SAS Data Set (BARB 8586) from district records which had the students' recorded ITBS/TAP scores for 1985 and 1986.

Results

Evaluation Question D1-2. What achievement gains were made by project participants in:

- a) Reading?
- b) Mathematics?
- c) Language?

The percentile gains of LEP A&B students with an ITBS pre-(1985) and posttest (1986) were examined. The percentage showing gains in test areas was:

Reading	55% (N=64)	Social Studies	57% (N=68)
Language	72% (N=65)	Science	25% (N=12)
Mathematics	62% (N=61)		

Science scores from Murchison were not included, because junior high school students in AISD do not take the ITBS Science subtest.

Evaluation Question D1-5. How do the English proficiency and achievement gains of students receiving tutoring compare to students who were not tutored? (Johnston experimental versus control group; Murchison experimental versus control group).

The programmer analyst merged the ITBS and TAP scores for 1985 and 1986 on the Title VII SAS Data Set (BARB8586) with the 1985-86 tutor Data Set (SA-BY001-0105). He ran a PROC MEANS (SA-BY002-0401) which looked at the grade equivalents (GE's) of tutored and nontutored students by subjects. Tutored students' mean gains were first examined by time tutored. The three time interval groups were:

- o Greater than one hour but less than two hours;
- o Greater than or equal to two hours but less than eight hours; and
- o Greater than or equal to eight hours.

No consistent patterns emerged (sample sizes were quite small).

ITBS/TAP

The number of project LEP students who had test scores for both spring, 1985 and spring, 1986 was limited because:

- Many students enrolled in AISD in fall, 1985, and therefore had no scores for spring, 1985.
- LEP A and B students are often exempted from taking the ITBS/TAP test because of limited knowledge of English.

As can be seen in Figure B-1, the number of tutored LEP students with test scores was less than 10 except in language. Significance tests were therefore not done. In language, tutored students made mean gains of .96 GE in a year, while nontutored students made average gains of 1.60 GE years.

SUBJECT	N	1985 MEAN	1986 MEAN	MEAN GAIN
TUTORED				
Reading	2	3.95	5.45	1.50
Language	21	4.80	5.76	.96
Mathematics	7	5.29	7.04	1.76*
Soc.Studies	4	5.58	8.05	2.48*
Science	2	7.40	8.15	.75
NONTUTORED				
Reading	56	4.96	5.93	.97
Language	36	4.79	6.39	1.60
Mathematics	51	6.29	7.28	.99
Soc.Studies	53	5.07	6.19	1.12
Science	05	6.90	7.10	.20

Figure B-1. ITBS/TAP GRADE EQUIVALENT (GE) GAINS FOR TUTORED AND NONTUTORED HISPANIC LEP A & B STUDENTS AT PROJECT SCHOOLS. Grades 7-12 combined except for science test (grade 9-12 only). Social studies is measured by Work Study Skills (ITBS) and Social Studies (TAP).
* = Difference between means gains and reported total gain is due to rounding off.

Several factors should be considered in interpreting these results.

- o Many students scored at the chance level on both the pre- and posttests. Also, there was great variability in the size of gains made by individual students.
- o The best comparison group available was tutored vs. nontutored students. However, students were not randomly assigned to be tutored or not. It appears the lowest achievers were tutored. Therefore, groups are not as comparable as would be desired.

Changes in the tutor component which might enhance effectiveness are discussed in the Tutor Appendix G.

MATH
 STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
MATHGES	7	5.2857	0.5956	4.3000	6.1000	0.2251	11.268	23.48	0.0001
MATHGE6	7	7.0429	1.1341	5.8000	8.5000	0.4287	16.103	16.43	0.0001
MATHGAIN	7	1.7571	1.0768	0.0000	3.2000	0.4070	61.282	4.32	0.0050

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MATH
 STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
MATHGES	51	6.2941	1.4746	4.3000	14.1000	0.2065	23.429	30.48	0.0001
MATHGE6	51	7.2843	1.2970	4.7000	10.8000	0.1816	17.805	40.11	0.0001
MATHGAIN	51	0.9902	1.3973	-6.5000	3.2000	0.1957	141.115	5.06	0.0001

SOCIAL STUDIES
 STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
SOCSTGES	4	5.5750	1.8839	3.7000	7.7000	0.9420	33.792	5.92	0.0096
SOCSTGE6	4	8.0500	0.9256	6.7000	8.8000	0.4628	11.498	17.39	0.0004
SOCSTGAN	4	2.4750	2.0304	0.7000	4.7000	1.0152	82.036	2.44	0.0927

SOCIAL STUDIES
 STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
SOCSTGES	53	5.0717	1.0710	3.2000	7.7000	0.1471	21.117	34.47	0.0001
SOCSTGE6	53	6.1868	1.2872	4.0000	10.9000	0.1768	20.806	34.99	0.0001
SOCSTGAN	53	1.1151	1.3033	-1.6000	4.5000	0.1793	116.879	6.23	0.0001

Attachment B-1
 (Page 1 of 3)

READING
STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
READGE5	2	3.9500	0.2121	3.8000	4.1000	0.1500	5.370	26.33	0.0242
READGE6	2	5.4500	0.2121	5.3000	5.6000	0.1500	3.892	36.33	0.0175
READGAIN	2	1.5000	0.4243	1.2000	1.3000	0.3000	28.284	5.00	0.1257

86.25

READING
STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
READGE5	56	4.9643	1.7995	2.4000	15.5000	0.2405	36.250	20.64	0.0001
READGE6	56	5.9304	1.0251	4.0000	7.9000	0.1370	17.286	43.29	0.0001
READGAIN	56	0.9661	1.6135	-8.3000	3.9000	0.2156	167.016	4.48	0.0001

LANGUAGE
STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
LANGGE5	21	4.8048	1.3829	3.0000	9.7000	0.3018	28.782	15.92	0.0001
LANGGE6	21	5.7619	1.2420	4.3000	6.9000	0.2710	21.555	21.26	0.0001
LANGGAIN	21	0.9571	1.1161	-0.8000	3.7000	0.2435	116.602	3.93	0.0008

LANGUAGE
STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
LANGGE5	36	4.7917	1.1960	2.6000	8.6000	0.1993	24.961	24.04	0.0001
LANGGE6	36	6.3839	1.5371	4.6000	11.1000	0.2562	24.059	24.94	0.0001
LANGGAIN	36	1.5972	1.3513	-2.6000	4.8000	0.2252	84.603	7.09	0.0001

Attachment B-1
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SCIENCE
STUDENTS WERE TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
SCIGES	2	7.4000	2.4042	5.7000	9.1000	1.7000	32.489	4.35	0.1438
SCIGE6	2	8.1500	0.2121	3.0000	8.3000	0.1500	2.603	54.33	0.0117
SCIGAIN	2	7.7500	2.6163	-1.1000	2.6000	1.8500	348.839	0.41	0.7548

SCIENCE
STUDENTS WERE NOT TUTORED

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
SCIGES	5	6.9000	2.0869	4.0000	9.7000	0.9333	30.244	7.39	0.0018
SCIGE6	5	7.1000	2.0809	3.9000	9.0000	0.9306	29.308	7.63	0.0016
SCIGAIN	5	0.2000	2.6702	-3.7000	3.4000	1.1942	1335.103	0.17	0.8751

APPENDIX B

Title VII Program
LA PRUEBA RIVERSIDE DE REALIZACION EN ESPAÑOL
Appendix C

LA PRUEBA RIVERSIDE de REALIZACION en ESPAÑOL

Purpose

La Prueba Riverside de Realización en Español (Prueba Riverside), an assessment appropriate for Spanish speakers, is thought to be a better measure of the academic achievement skills of those LEP students who have little English and are receiving instruction in Spanish than the English ITBS/TAP. It was administered to provide information concerning:

Decision Question D1: Should the Title VII program be continued as it is, modified, or discontinued?

Evaluation Question D1-3. Did those project participants receiving instruction in Spanish exhibit significant gains in their Spanish language scores?

Evaluation Question D1-4. Did those project participants receiving bilingual instruction in content areas exhibit achievement gains when tested in Spanish?

Information Need I2. Did the project meet its objectives?

Procedure

During October and November of 1985, the Prueba Riverside was administered to project students in grades 7 and 8 at Murchison by the TBE teachers. The project specialist administered the Prueba to project students in grades 9 and 10 at Travis. These results provided the baseline for comparison with the April-May of 1986 re-evaluation scores.

Hispanic students in the bilingual and transitional programs at their respective schools function with varying proficiency in two languages. Therefore, it was assumed that their Spanish fluency would generally not be as proficient as Spanish monolingual speakers. Subsequently, on the Prueba students were assigned to a test level designated as "low average or below average." The only exceptions to this were the tenth graders at Murchison who were tested out of level because the test ceiling was ninth grade. Students were given the following levels:

Grade	Level
7	12*
8	13
9	14
10	14

*Due to an error in test administration, seventh graders were given Level 13 first semester. This needs to be taken into account when considering test/retest reliability.

Because Prueba Riverside has only spring norms, students' raw scores were used to compare achievement gains. Only those students with both spring and fall scores were included.

Prueba pre-and posttest scores were keypunched and entered into SAS data files, SA-BY001-0102 and SA-BY001-0102 (Attachment C-1). Only those students who had both pre-and posttests were included in the final sample. In November, 1986, the programmer ran a SAS PROC SORT of LEP A & B students at Murchison and Travis. The percent of those students making gains in the subtest areas were hand calculated. Files were merged to create SA-BY003-0301 so gains could be reviewed. A PROC MEANS was included in this program to examine significance.

Results

Evaluation Question D1-3. Did those project participants receiving instruction in Spanish exhibit significant gains in their Spanish language scores? (Murchison and Travis only)

As can be seen below in Figure 1, significant (.05) or highly significant (.01) overall gains were found in all subtest areas.

VARIABLE	N	MEAN	PR > T
Reading	91	1.1429	.0106**
Language	92	.9565	.0153*
Mathematics	93	1.4301	.0004**
Social Studies	92	.8370	.0494*
Science	92	1.2174	.0023**

Figure 1. LA PRUEBA RIVERSIDE RAW SCORE MEAN GAINS. T-tests were run to check pre-to posttest gains for significance.

* = Significance at the .05 level of probability

* = Significance at the .01 level of probability

Thus, the objective as stated was met.

It is interesting to note that when the schools were examined separately, Murchison project LEP students made significant gains in all areas except social studies. Students at Travis, however, did not make significant gains. (See Attachment C-1). This discrepancy may be influenced by the difference in programs at the two schools. At Murchison students are enrolled in an intensive Transitional Bilingual Education Program whereas students at Travis participated in a new ESL/content area support program.

Evaluation Question D1-4. Did those project participants receiving bilingual instruction in content areas exhibit achievement gains in those content areas when tested in Spanish? (Murchison only)

When the students' pre- and posttest scores were looked at by content area, the percentage showing gains in raw scores was:

Reading	58%	Social Studies	57%
Language	58%	Science	55%
Mathematics	64%		

It should be noted that language scores of the Prueba Riverside de Realizacion en Español (Prueba Riverside) were examined instead of the Spanish LAB, because the Spanish LAB testing was not administered in the spring to prevent over-testing of students. It is not known whether this substitution made the objective more difficult to meet.

FILE ID AVW

CARD FILE LABEL

LOCATION ORE

NAME

La Prueba - 1986

DATE

Feb 14, 1986

COMMENTS _____

FIELD	COLUMNS	DESCRIPTION
A	1-3	FILE ID
	4-10	Student ID Number
	11-30	Student Name (Last, First)
	31-32	Grade
	33-35	School Code
	(36-56)	La Prueba Riverside
	36-37	Reading (Raw Score)
	38-39	Language " "
	40-41	Math " "
	42-43	Composite " "
	44-45	Soc Stud " "
	46-47	Science " "
	-	(Reading Subtests)
	48-50	Comprehension (Percent Right)
	51-53	Vocabulary
	54-56	Word Study Skills
	-	
	-	
	-	
	-	
	-	

NOTE: THE JOB EVISASBY HAS BEEN RUN UNDER RELEASE 82.4 OF SAS
AT AUSTIN INDEPENDENT SCHOOL DISTRICT (J1986001).

NOTE: CPUID VERSIGN = FF SERIAL = 013553 MODEL = 4341.

NOTE: NO OPTIONS SPECIFIED.

86.25

1			00000130
2	OPTIONS ERRORS = 0;		00000140
3	TITLE TITLE VII PROGRAM	SA-BY003 0301;	00000150
4	TITLE2 PRUEBA = PRE (FALL 1985)	SA-BY001 0102;	00000160
5	TITLE3 PRUEBA = PCST (SPRING 1986)	SA-BY001 0103;	00000170
6	TITLE4 FUTUR DATA FILE	SA-BY001 0105;	00000180

7			00000190
8	DATA BARBFILL:		00000200
9	INPUT FILEID	\$ 1-3	00000210
10	STUID	\$ 4-10	00000220
11	STUNAME	\$ 11-30	00000230
12	GRADE	\$ 31-32	00000240
13	SCHOOL	\$ 33-35	00000250
14	READ	36-37	00000260
15	LANG	38-39	00000270
16	MATH	40-41	00000280
17	COMP	42-43	00000290
18	SOCST	44-45	00000300
19	SC	46-47	00000310
20	COMPREH	48-50	00000320
21	VOCAB	51-53	00000330
22	WORKSTU	54-56	00000340
23	PREENG	Z02.	00000350
24	POSTENG	Z02.	00000360
25	PRESPAN	Z02.	00000370
26	POSTSPAN	Z02.	00000380
27	IF SCHOOL = '007' OR SCHOOL = '052';		00000390
28	IF GRADE GE '07' AND GRADE LE '10';		00000400
29	KEEP STUID SCHOOL GRADE READ LANG MATH SOCST SC STUNAME;		00000410
30	CARDS;		00000420

NOTE: INVALID DATA FOR POSTENG IN LINE 31 59-60. 24:31
NOTE: INVALID DATA FOR POSTSPAN IN LINE 31 63-64. 26:31
NOTE: FURTHER ERRORS OF THIS TYPE WILL NOT BE PRINTED.
OPTIONS ERRORS=NN; * LIMIT REACHED.

RULE: 1234567 101234567 201234567 301234567 401234567 501234567 601234567 701234567 80

31 AVW1330J01CASTRO,RAFAEL 12003. 83 90 00000010
FILEID=AVW STUID=1330J01 STUNAME=CASTRO,RAFAEL GRADE=12 SCHOOL=003 READ=. LANG=. MATH=. COMP=. SOCST=. SC=. COMPREH=.
VOCAB=. WORKSTU=. PREENG=83 POSTENG=. PRESPAN=90 POSTSPAN=. _ERROR_=1 _N_=1
NOTE: DATA SET USERG10.BARBFILL HAS 180 OBSERVATIONS AND 9 VARIABLES. 104 OBS/TRK.
NOTE: THE DATA STATEMENT USED 5.93 SECONDS AND 330K.

249		00000440
250	PROC SORT;	00000450
251	BY STUID;	00000460
252		00000470

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
REQUIRED BY YOUR SYSTEM SORT UTILITY.

Attachment C-2
(Page 1 of 5)

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL1 HAS 180 OBSERVATIONS AND 9 VARIABLES. 104 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 18.34 SECONDS AND 292K.

253	DATA BARBFIL2;			00000480
254	INPUT	FILEID	\$ 1-3	00000490
255		STUID	\$ 4-10	00000500
256		READ2	36-37	00000510
257		LANG2	38-39	00000520
258		MATH2	40-41	00000530
259		COMP2	42-43	00000540
260		SCCST2	44-45	00000550
261		SC2	46-47;	00000560
262	CARDS;			00000570

NOTE: DATA SET USER010.BARBFIL2 HAS 146 OBSERVATIONS AND 8 VARIABLES. 128 OBS/TRK.

NOTE: THE DATA STATEMENT USED 4.81 SECONDS AND 306K.

409	;			00000590
410	PROC SORT;			00000600
411	BY STUID;			00000610
412				00000620

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 146 OBSERVATIONS AND 8 VARIABLES. 128 OBS/TRK.

NOTE: THE PROCEDURE SORT USED 21.39 SECONDS AND 292K.

413	DATA BARBFIL1;			00000630
414	MERGE BARBFIL1 (IN = INFIL1)			00000640
415	BARBFIL2 (IN = INFIL2);			00000650
416	BY STUID;			00000660
417	IF INFIL1 = 1 AND INFIL2 = 1;			00000670
418	READC = READ2 = READ;			00000680
419	LANGC = LANG2 = LANG;			00000690
420	MATHC = MATH2 = MATH;			00000700
421	SCCSTC = SCCST2 = SCCST;			00000710
422	SCC = SC2 = SC;			00000720
423				00000730
424				00000740

NOTE: MISSING VALUES WERE GENERATED AS A RESULT OF PERFORMING
AN OPERATION ON MISSING VALUES.
EACH PLACE IS GIVEN BY: (NUMBER OF TIMES) AT (LINE):(COLUMN).

13 AT 418:13 12 AT 419:13 10 AT 420:13 11 AT 421:14 11 AT 422:13

NOTE: DATA SET USER010.BARBFIL1 HAS 120 OBSERVATIONS AND 21 VARIABLES. 46 OBS/TRK.

NOTE: THE DATA STATEMENT USED 3.81 SECONDS AND 306K.

425	DATA BARBFIL2;			00000750
426	INPUT	SCHOOL	1-1	00000760
427		GRADE	\$ 5-6	00000770
428		STUID	\$ 8-14	00000780
429		STUNAME	\$ 16-35	00000790
430		SEMESTER	\$ 38	00000800
431	40 TUTREAD		204.2	00000810

86.25

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432	455	TUTLANG	204.2	00000820
433	450	TUTMATH	204.2	00000830
434	455	TUTSOCST	204.2	00000840
435	460	TUTSCI	204.2;	00000850
436	KEEP STUID;			00000860
437	CARDS;			00000870

86.25

NOTE: INVALID DATA FOR TUTREAD IN LINE 438 40-43. 431:31
 NOTE: INVALID DATA FOR TUTLANG IN LINE 438 45-48. 432:31
 NOTE: INVALID DATA FOR TUTMATH IN LINE 438 50-53. 433:31
 NOTE: INVALID DATA FOR TUTSOCST IN LINE 438 55-58. 434:31
 NOTE: INVALID DATA FOR TUTSCI IN LINE 438 60-63. 435:31
 NOTE: FURTHER ERRORS OF THIS TYPE WILL NOT BE PRINTED.

OPTIONS ERRORS=1; * LIMIT REACHED.

RULE: 1234567 101234567 201234567 301234567 401234567 501234567 601234567 701234567 80

438 3 J9 1957321 DELECN MARTA 00000010
 SCHOOL=3 GRADE=09 STUID=1957321 STUNAME=DELECN MARTA SEMESTER= TUTREAD=. TUTLANG=. TUTMATH=. TUTSOCST=. TUTSCI=.
 ERROR=1 _N_=1
 NOTE: DATA SET USER010.BARBFIL2 HAS 167 OBSERVATIONS AND 1 VARIABLES. 726 OBS/TRK.
 NOTE: THE DATA STATEMENT USED 4.62 SECONDS AND 306K.

605	:		00000890
606	PROC SORT;		00000900
607	BY STUID;		00000910
608			00000920
609			00000930

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL2 HAS 167 OBSERVATIONS AND 1 VARIABLES. 726 OBS/TRK.
 NOTE: THE PROCEDURE SORT USED 15.15 SECONDS AND 292K.

610	DATA BARBFIL1;	00000940
611	INFIL1 = 0;	00000950
612	MERGE BARBFIL1 (IN = INFIL1)	00000960
613	BARBFIL2 (IN = INFIL2);	00000970
614	BY STUID;	00000980
615	IF INFIL1 = 1 AND INFIL2 = 1;	00000990
616		00001000
617		00001010

NOTE: DATA SET USER010.BARBFIL1 HAS 100 OBSERVATIONS AND 21 VARIABLES. 46 OBS/TRK.
 NOTE: THE DATA STATEMENT USED 4.32 SECONDS AND 306K.

618	PROC SORT;	00001020
619	BY SCHOOL GRADE STUNAME;	00001030
620		00001040

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
 REQUIRED BY YOUR SYSTEM SORT UTILITY.

THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL1 HAS 100 OBSERVATIONS AND 21 VARIABLES. 46 OBS/TRK.
 NOTE: THE PROCEDURE SORT USED 19.06 SECONDS AND 292K.

621	PROC PRINT;	00001050
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(Page 3 of 5)

TITLE VII PROGRAM
PRUEBA - PRE (FALL 1985)
PRUEBA - POST (SPRING 1986)
TUTOR DATA FILE

SA-BY003 0301 11:11 TUESDAY, DECEMBER 16, 1986 4
SA-BY001 0102
SA-BY001 0103
SA-BY001 0105

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PROB T
READ	91	16.4066	5.8080	5.0000	29.0000	0.6088	35.400	26.95	0.0001
READ2	100	17.3100	5.8113	5.0000	29.0000	0.5811	33.572	29.79	0.0001
READG	91	1.1429	4.1755	-19.0000	10.0000	0.4377	365.353	2.61	0.0106
LANG	92	11.9457	4.5389	1.0000	20.0000	0.4732	37.996	25.24	0.0001
LANG2	100	12.7803	4.1841	4.0000	21.0000	0.4184	32.739	30.54	0.0001
LANGG	92	0.9565	3.7119	-12.0000	13.0000	0.3870	388.064	2.47	0.0153
MATH	94	15.3617	4.7501	6.0000	25.0000	0.4906	30.961	31.32	0.0001
MATH2	99	16.7475	5.1237	7.0000	28.0000	0.5149	30.594	32.52	0.0001
MATHG	93	1.4301	3.7486	-15.0000	13.0000	0.3887	262.121	3.68	0.0004
SOCST	93	14.1505	4.9846	3.0000	25.0000	0.5169	35.226	27.38	0.0001
SOCST2	99	14.9293	5.0066	2.0000	25.0000	0.5032	33.536	29.67	0.0001
SOCSTG	92	0.8370	4.0309	-17.0000	11.0000	0.4202	481.610	1.99	0.0494
SC	93	13.6022	4.6615	3.0000	23.0000	0.4854	34.417	28.02	0.0001
SC2	99	14.6970	5.1754	3.0000	25.0000	0.5201	35.214	28.26	0.0001
SCG	92	1.2174	3.7176	-10.0000	13.0000	0.3876	305.372	3.14	0.0023

NOTE: THE PROCEDURE MEANS USED 3.50 SECONDS AND 350K AND PRINTED PAGE 4.

633	PROC MEANS MAXDEC=4	N	MEAN	STD	MIN	MAX	STDERR	CV	T	PAT;	J0001170
634	VAR READ	READ2	READG								00001180
635	LANG	LANG2	LANGG								00001190
636	MATH	MATH2	MATHG								00001200
637	SOCST	SOCST2	SOCSTG								00001210
638	SC	SC2	SCG								00001220
639	BY SCHOOL;										00001230
640											00001240

86.25

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TITLE VII PROGRAM
PRUEBA - PRE (FALL 1985)
PRUEBA - POST (SPRING 1986)
TUTOR DATA FILE

SA-BY003 0301 11:11 TUESDAY, DECEMBER 16, 1986 5
SA-BY001 0102
SA-BY001 0103
SA-BY001 0105

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN	C.V.	T	PR> T
----- SCHOOL=307 -----									
READ	12	21.3333	5.5487	11.0000	28.0000	1.6018	26.009	13.32	0.0001
READ2	15	20.8667	6.0350	9.0000	29.0000	1.5580	28.917	13.39	0.0001
READG	12	5.1667	2.6572	-5.0000	6.0000	0.7671	1594.308	0.22	0.8320
LANG	13	14.2308	3.8977	8.0000	20.0000	1.0810	27.389	13.16	0.0001
LANG2	15	15.2000	3.3448	10.0000	21.0000	0.8740	22.269	17.39	0.0001
LANGG	13	0.7692	2.6193	-3.0000	5.0000	0.7264	340.465	1.06	0.3104
MATH	13	17.1538	6.1352	7.0000	25.0000	1.7016	35.766	10.08	0.0001
MATH2	15	13.3333	6.2183	7.0000	26.0000	1.6055	33.918	11.42	0.0001
MATHG	13	5.9231	4.0510	-5.0000	8.0000	1.1235	438.854	0.82	0.4273
SOCST	12	15.9167	5.4349	6.0000	23.0000	1.5689	34.146	10.15	0.0001
SOCST2	15	17.2000	5.3211	9.0000	24.0000	1.3739	30.937	12.52	0.0001
SOCSTG	12	1.5000	3.3437	-5.0000	7.0000	0.9653	222.928	1.55	0.1485
SC	12	17.8333	4.7065	9.0000	22.0000	1.3587	26.392	13.13	0.0001
SC2	15	18.0000	5.1130	8.0000	25.0000	1.3202	28.406	13.63	0.0001
SCG	12	0.5000	2.3549	-3.0000	4.0000	0.6793	470.976	0.74	0.4774

----- SCHOOL=052 -----

READ	79	15.6582	5.5326	5.0000	29.0000	0.6191	35.142	25.29	0.0001
READ2	85	16.6824	5.5746	5.0000	26.0000	0.6047	33.416	27.59	0.0001
READG	79	1.2911	4.3535	-19.0000	10.0000	0.4698	337.180	2.64	0.0101
LANG	79	11.5696	4.5680	1.0000	20.0000	0.5117	39.310	22.61	0.0001
LANG2	85	12.3529	4.1825	4.0000	21.0000	0.4537	33.858	27.23	0.0001
LANGG	79	0.9873	3.8746	-12.0000	15.0000	0.4359	392.429	2.26	0.0263
MATH	81	15.0741	4.4771	6.0000	24.0000	0.4575	29.701	30.30	0.0001
MATH2	84	16.4643	4.8927	8.0000	28.0000	0.5338	29.717	30.84	0.0001
MATHG	80	1.5125	3.7179	-15.0000	13.0000	0.4157	245.810	3.64	0.0005
SOCST	81	13.8889	4.8964	3.0000	25.0000	0.5440	35.254	25.53	0.0001
SOCST2	84	14.5238	4.8706	2.0000	25.0000	0.5314	33.535	27.33	0.0001
SOCSTG	80	0.7375	4.1331	-17.0000	11.0000	0.4621	560.414	1.60	0.1145
SC	81	12.9753	4.3674	3.0000	23.0000	0.4853	33.659	26.74	0.0001
SC2	84	14.1071	4.9892	3.0000	25.0000	0.5444	35.366	25.91	0.0001
SCG	80	1.3250	3.8804	-10.0000	13.0000	0.4338	292.861	3.05	0.0031

NOTE: THE PROCEDURE MEANS USED 6.04 SECONDS AND 350K AND PRINTED PAGE 5.

641 PROC SORT; 00001250
642 BY GRADE; 00001260

WARNING: SORTSIZE VALUE IS LESS THAN THE MINIMUM
REQUIRED BY YOUR SYSTEM SORT UTILITY.
THE SORT UTILITY MAY TERMINATE ABNORMALLY.

NOTE: DATA SET USER010.BARBFIL1 HAS 100 OBSERVATIONS AND 21 VARIABLES. 46 OBS/TRK.
NOTE: THE PROCEDURE SORT USED 19.01 SECONDS AND 292K.

643 PROC MEANS MAXDEC=4 N MEAN STD MIN MAX STDERR CV T PR>|T|; 00001270
644 VAR READ READ2 READG 00001280
645 LANG LANG2 LANGG 00001290
646 MATH MATH2 MATHG 00001300
647 SOCST SOCST2 SOCSTG 00001310
648 SC SC2 SCG; 00001320
649 BY GRADE; 00001330
650 00001340

86.25

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Title VII Program
CRITERION-REFERENCED TEACHER COMPETENCY CHECKLIST
Appendix D

CRITERION-REFERENCED TEACHER COMPETENCY CHECKLIST

Purpose

A criterion-referenced teacher competency checklist was developed and administered to provide information concerning:

Decision Question D1: Should the Title VII program be continued as it is, modified, or discontinued?

Evaluation Question D1-7. Did high school teachers participating in the ESL endorsement training program demonstrate improvement in required competency areas?

Information Need I2. Did the project meet its objectives?

Participating teachers will master at least 85% of the project-related staff development skills presented to them during endorsement training sessions as measured by teacher competency checklist and university endorsement course examinations.

Procedure

A criterion-referenced teacher competency checklist called the Teacher Self Inventory was developed by the Office of Evaluation and Research staff in coordination with the project director and project specialist. See Attachment D-1. It was administered as a pre- and post self-inventory of teacher competency in the instruction of LEP students. The Teacher Self Inventory was administered twice during the second course in the projected four course ESL endorsement series. The pretest was administered at the first class meeting in January, and the posttest was given during the last class session in April, 1986.

The Teacher Self Inventory was not administered during the first course in the ESL endorsement series because the course focused upon language development and acquisition. The self-inventory was thought to be a more appropriate measure of teacher adaptation of the second course's content which dealt with ESL methodology and its application to the classroom.

Specific ways in which the achievement of objectives were measured by the teacher survey and endorsement course grades will be discussed under results.

Results

Evaluation Question D1-7. Did high school teachers participating in the ESL endorsement training program demonstrate improvement in required competency areas?

In order to answer this question, the results of the Teacher Self Inventory were looked at in three ways. First, a frequency of response was calculated for each of the 12 items on the pre- and post-survey with corresponding percentages tabulated for each frequency. Second, the mean response for each item was computed with SAS. Third, the means on the pre-versus post-survey items were tested using the General Linear Models regression procedure of the SAS statistical package SA-BY003-01-01 in the EPIN library. This provided a t test of differences in means.

It should be noted that it was not possible to match individual teachers' pre- and post-ratings because teachers responded anonymously. Therefore, the mean represents the average of the composite loadings of each of the twelve items. The comparison made is between the two groups' (pre- and post-survey) average item response. The reader is cautioned that 4 more people filled out pre-surveys than post-surveys. It is possible that these respondents were more negative or positive than the rest of the group initially. The reader should also be cautioned that with the small N, it is more difficult to obtain significance.

There was a positive pattern of movement between the pre- and post-surveys. (See Figures D-1 and D-2.) The means increased for 11 of 12 items. However, regression analyses revealed these differences were significant in only two cases (items 5 and 9).

- o Item #5--On the post-survey, 46% more respondents felt that their organization of instruction was adequate to meet the needs of LEP students. Those who disagreed decreased by 43%. This finding was statistically significant.
- o Item #9--On the post-survey, 20% more respondents felt they were able to use audiovisual equipment effectively to augment LEP student learning. Those who disagreed decreased by 35%. (Those who were neutral increased by 15%.) This finding was statistically significant.

Some of the interesting patterns of movement found were:

- o Item #1--On the post-survey, 26% more respondents felt prepared to teach LEP students than on the pre-surveys. Those with neutral feelings decreased by 28%.
- o Item #4--On the post-survey, 18% more respondents saw themselves able to respond to LEP students' language needs. Those who were neutral or disagreed decreased by 20%.

- o Item #6--On the post-survey, 44% more respondents saw themselves as adequate in helping LEP students stay on task. Those who were neutral or disagreed decreased by 45%.
- o Item #10--On the post-survey, 30% more respondents felt that they employed varied and student-appropriate evaluation strategies when assessing students. Those who were neutral or disagreed decreased by 31%.

Based on an item by item consideration, almost three-quarters of the teachers as opposed to less than half before, now feel prepared to teach LEP students. In addition, at least 70% of the posttest respondents also see themselves as competent in working with LEP students in terms of:

- o responding to specific language needs,
- o helping students stay on task,
- o making content area relevant and useful, and
- o developing appropriate objectives.

Information Need 12. Did the project meet its objectives? Participating teachers will master at least 85% of the project-related staff development skills presented to them during endorsement training sessions as measured by teacher competency checklist and university endorsement course examinations.

In order to measure achievement of this objective, first the teacher self inventories (teacher competency checklists) were looked at individually. Of the 14 teachers responding, 6 reported feeling competent on 85% of the items (agreed or strongly agreed). It should be noted that 83.3% was the actual criterion used as it represented 10 out of 12 positive responses. Thus the objective was not met as stated based on this measure.

Next, course grades for the project teachers were examined. A grade of "A" or "B" was used as the criterion for determining a mastery level of at least 85%. Of the 17 who completed the course, 10 or 59% met the criterion for staff development skill mastery. This also does not provide support for achievement of this criterion.

According to these data, project teachers are increasing their ESL instructional skills after two courses in the projected four course ESL endorsement series. However, as a group, they did not meet the projected 85% mastery level.

1. I feel prepared to teach LEP students.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	6 (35%)	5 (36%)
Agree	2 (11%)	5 (36%)
Neutral	6 (35%)	1 (07%)
Disagree	3 (18%)	3 (21%)
Strongly Disagree		
No Response		

2. I am comfortable teaching my content area to LEP students.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	3 (18%)	6 (43%)
Agree	9 (53%)	4 (29%)
Neutral	2 (12%)	1 (07%)
Disagree	2 (12%)	1 (07%)
Strongly Disagree	1 (06%)	1 (07%)
No Response		1 (07%)

3. I am able to elicit class participation from my LEP students.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	3 (18%)	3 (21%)
Agree	6 (35%)	5 (36%)
Neutral	5 (29%)	5 (36%)
Disagree		
Strongly Disagree		
No Response	3 (18%)	1 (07%)

Figure D-1. ITEM BREAKDOWN BY NUMBER AND PERCENTS ON THE PRE-AND POST-SURVEYS. (Page 1 of 4)

4. I am able to respond to LEP students' language needs.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	4 (24%)	3 (21%)
Agree	5 (29%)	7 (50%)
Neutral	2 (12%)	2 (14%)
Disagree	2 (12%)	1 (07%)
Strongly Disagree	3 (18%)	1 (07%)
No Response	1 (06%)	

5. My present organization of instruction is adequate to meet the needs of LEP students.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	2 (12%)	1 (07%)
Agree	1 (06%)	8 (57%)
Neutral	4 (24%)	3 (21%)
Disagree	9 (53%)	2 (14%)
Strongly Disagree	1 (06%)	
No Response		

6. I can adequately help my LEP students stay on task.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	2 (12%)	2 (14%)
Agree	5 (29%)	10 (71%)
Neutral	4 (24%)	
Disagree	6 (35%)	1 (07%)
Strongly Disagree		1 (07%)
No Response		

7. My instruction of the content area is relevant to and useful for LEP students.

	<u>Pre-survey</u> <u>N=17</u>	<u>Post-survey</u> <u>N=14</u>
Response	Number of Responses	Number of Responses
Strongly Agree	3 (18%)	5 (36%)
Agree	7 (41%)	5 (36%)
Neutral	4 (24%)	3 (21%)
Disagree	1 (06%)	1 (07%)
Strongly Disagree	2 (12%)	
No Response		

8. I can adequately design objectives appropriate for the needs and achievement of my LEP students.

	<u>Pre-survey</u> N=17	<u>Post-survey</u> N=14
Response	Number of Responses	Number of Responses
Strongly Agree	2 (18%)	5 (36%)
Agree	7 (41%)	5 (36%)
Neutral	4 (24%)	3 (21%)
Disagree	1 (06%)	1 (07%)
Strongly Disagree	2 (12%)	
No Response		

9. I can utilize audiovisual equipment effectively to augment LEP student learning.

	<u>Pre-survey</u> N=17	<u>Post-survey</u> N=14
Response	Number of Responses	Number of Responses
Strongly Agree	2 (12%)	4 (29%)
Agree	8 (47%)	7 (50%)
Neutral	1 (06%)	3 (21%)
Disagree	5 (29%)	
Strongly Disagree	1 (06%)	
No Response		

10. I employ varied and student-appropriate evaluation strategies when assessing my LEP students.

	<u>Pre-survey</u> N=17	<u>Post-survey</u> N=14
Response	Number of Responses	Number of Responses
Strongly Agree	2 (12%)	3 (21%)
Agree	5 (29%)	7 (50%)
Neutral	9 (53%)	3 (21%)
Disagree	1 (06%)	1 (07%)
Strongly Disagree		
No Response		

Figure D-1. (Page 3 of 4)

11. In terms of my instructional objectives, I am able to individualize activities appropriate for the special needs and achievement levels my LEP students.

Pre-survey
N=17

Post-survey
N=14

Response	Number of Responses	Number of Responses
Strongly Agree	2 (12%)	2 (14%)
Agree	5 (29%)	5 (36%)
Neutral	5 (29%)	6 (43%)
Disagree	4 (24%)	1 (07%)
Strongly Disagree	1 (06%)	
No Response		

12. I employ a variety of strategies to clarify instruction (e.g. modeling, audiovisual examples, whole group responses, etc.).

Pre-survey
N=17

Post-survey
N=14

Response	Number of Responses	Number of Responses
Strongly Agree	5 (29%)	3 (21%)
Agree	5 (29%)	8 (57%)
Neutral	5 (29%)	2 (14%)
Disagree	1 (06%)	
Strongly Disagree	1 (06%)	1 (07%)
No Response		

Figure D-1. (Page 4 of 4)

Item	N		Mean	
	Pre	Post	Pre	Post
1. I feel prepared to teach LEP students.	17	14	3.53	3.86
2. I am comfortable teaching my content area to LEP.	17	13	3.70	4.00
3. I am able to evoke class participation of my LEP students.	14	14	3.86	3.71
4. I am responsive to LEP students' needs.	16	14	3.44	3.71
5. My present organization of instruction is adequate to meet the needs of LEP students.	17	14	2.59	3.57*
6. I can adequately help my LEP students stay on task.	17	14	3.18	3.86
7. My instruction of the content area is relevant to and useful for LEP students.	17	14	3.53	4.07
8. I can adequately design objectives appropriate for the needs of my LEP students.	17	14	3.65	3.86
9. I can utilize audiovisual equipment effectively to augment LEP student learning.	17	14	3.29	4.07*
10. I employ varied and student-appropriate evaluation strategies when assessing my LEP students.	17	14	3.47	3.86

*Items showing statistically significant gains.

Figure D-2. AVERAGE FREQUENCIES FOR TEACHER SELF INVENTORY ITEMS.
(Page 1 of 2)

Item	N		Mean	
	Pre	Post	Pre	Post
11. In terms of my instructional objectives, I am able to individualize activities appropriate for the special needs and levels of my LEP students.	17	14	3.18	3.57
12. I employ a variety of strategies to clarify instruction (e.g. modeling, audiovisual examples, whole group responses, etc.)	17	14	3.71	3.86

The scale ranged from Strongly Agree (5) to Strongly Disagree (1)

*Items showing statistically significant gains.

Figure D-2. (Page 2 of 2)

Title VII Program
ADMINISTRATOR INTERVIEWS
Appendix E

ADMINISTRATOR INTERVIEWS

Purpose

Administrator interviews were conducted by the evaluator to provide information concerning:

Decision Question D1: Should the Title VII program be continued as it is, modified, or discontinued?

Evaluation Question D1-8. What concerns/strengths about the implementation of the project were identified by:

- a) Project administrators?
- b) Campus administrators?

Evaluation Question D1-9. Was the program implemented as planned?

Information Need I2. Did the project meet its objectives?

Procedure

To address the evaluation questions associated with the Title VII program implementation and effectiveness, interviews were conducted with the project campus' administrators, the project director, and the project specialist. All interviews were conducted by the program evaluation associate in the offices of the staff.

Separate interview forms for campus and project administrators were developed by the ORE staff to guide the interviews as shown in Attachments E-1 and E-3. Some questions were common to both.

During March and April of 1986, campus administrators were interviewed at the four project schools. These were the principals who worked most closely with the LEP student population. However, when making the first appointments for interviews, the principals pointed out the key involvement and awareness of the staff member serving as the school's LEP coordinator. Therefore, it was decided to conduct the interview with both the administrator and LEP coordinator present.

The project director and project specialist were interviewed together during the month of May, 1986.

Notes from the four campus interviews were paraphrased by the evaluation associate and recorded on a composite interview questionnaire (Attachments E-2 and E-4). Confidentiality was provided by designating the campus interviews by "school number" and recording the project administrators' responses together.

Results

Evaluation Question D1-8. What concerns/strengths about the implementation of the project were identified by:

- a) Project administrators?
- b) Campus administrators?

Campus Administrator Interviews

In general, the schools' administrators believed that Title VII was having a positive overall impact. Specifically, all noted positive gains in:

- LEP student attendance,
- Self concept and school attitude of LEP students,
- Acquisition of English language skills and academic content of achievement of LEP students.

In regard to the three program components:

- All four schools thought the staff development component was "mostly" successful.
- Three schools' administrative staffs judged the curriculum component to be "mostly" successful. One thought it was "somewhat" successful.
- The tutor component was believed to be "completely" successful by two schools while one school said they had "no idea" about its success. This school had just had tutors for 2 1/2 months prior to the interview. The fourth school did not have tutors.

Complete results are shown in Attachment E-2.

Project Administrators' Interview

Both the project coordinator and project specialist saw the three Title VII components as being successfully implemented. Specifically they believe:

- Project teachers are adapting content areas appropriately for LEP students.
- Very few students involved have dropped out.
- Teacher competency in instruction of LEP students is increasing.
- LEP student attendance is increasing.
- Teachers have a more positive image of LEP students; to the extent this is conveyed to the students, a more positive self-concept may result.
- Coordination is improving among and between teachers as a result of videotaping in endorsement classes.
- Tutoring assistance is impacting LEP students' learning and knowledge of English.

The project coordinator and project specialist made these recommendations for modifications or improvements:

- The ESL endorsement program should continue.
- The tutor program should be expanded.
- Workshop training sessions should be continued with an advanced series of topics concerning instruction of LEP students (Listed in Attachment E-4).
- Videotapes and the handbook bibliography should be consolidated for greater accessibility.
- Title VII should be expanded to include other LEP groups.

Complete results are shown in Attachment E-4.

There is a general pattern of positive agreement among the administrators, project coordinator, and project specialist concerning implementation of the three program components. Observations were particularly positive at those schools which had larger Hispanic LEP populations, more teacher participants in training activities, and/or had university tutoring assistance for two semesters.

Campus Administrator Interview Questions

1. How well have project teachers implemented Title VII program objectives with LEP students in terms of successes or problems in the following:

Adapting the content areas to meet the needs and levels of the LEP students?

Developing appropriate and varied strategies for evaluation of LEP students?

Decreasing the dropout rate of LEP students?

Demonstrating increased competency in instruction of LEP students?

2. Do you feel Title VII has impacted LEP student attendance?

Yes ☐ No ☐
Comments: _____

3. In your opinion, has Title VII positively impacted the self-concept and school attitude of LEP students?

Yes, A Lot	To Some Extent	Not At All
1	2	3

Comments: _____

4. In your opinion, what impact has Title VII had upon the acquisition of English language skills and academic content achievement of LEP students?

5. What coordination are you aware of that has occurred among ESL and content area teachers?

Has it improved? Yes ☐ No ☐

Is it adequate? Yes ☐ No ☐

Comments:

6. Did any problem(s) occur which could impact Title VII program outcomes on your campus (teacher ratings, achievement of students)?

7. How successful do you believe each of the Title VII components were this year?

Completely 1	Mostly 2	Somewhat 3	Not At All 4	
Staff Development		1	2	3 4
Tutors		1	2	3 4
Curriculum Development		1	2	3 4

Comments:

8. What recommendations do you have for modifications or improvement of the Title VII program in terms of:

Staff Development?

Tutors?

Curriculum Development?

9. Do you think that other campuses would benefit from having Title VII services available for LEP students?

Yes ___ No ___

Why or why not?

10. Overall, do you feel Title VII has had an impact?

Campus Administrator Interview Questions

1. How well have project teachers implemented Title VII program objectives with LEP students in terms of successes or problems in the following:**Adapting the content areas to meet the needs and levels of the LEP students?**

- School #1 Some great changes! Students say that they are more comfortable and that the attitude toward them has changed. Teachers are using more appropriate texts, and lesson plans are more tailor-made. Teachers appear more comfortable asking for help. They perceive more support with more resources available. Also, they are more able to adapt or make appropriate materials for LEP students.
- School #2 Title VII's ESL training and endorsement program have impacted a low failure rate. This is credited to the Title VII funds that were used for computer software, student workbooks, and tests.
- School #3 There were no complaints of any kind from students or anyone else. No one has come to either the administrator or LEP coordinator with problems about LEP students. The ESL teacher has worked with students outside of school hours, and other teachers have come to her to consult about LEP students.
- School #4 They have adapted it well. Several ESL students have made the honor roll.

Developing appropriate and varied strategies for evaluation of LEP students?

- School #1 Teachers have a better handle on it, because they are now more able to adapt materials. Expectations are more realistic. Tools used to evaluate are more catered to students.
- School #2 The Prueba Riverside test is a new evaluation tool and will be used to determine what's happening to Spanish skills.
- School #3 I don't feel comfortable in answering. The teachers would have to answer.
- School #4 They're in the process of doing it now. This is the goal monitoring stage.

Decreasing the dropout rate of LEP students?

- School #1 Absolutely. It's increased the holding power.
- School #2 Hard to say. Prevention is hard to measure. The tutors are helping and will help students (LEP) who are marginal. This program has only been in effect this year, since November. This is a gut-level reaction.
- School #3 Having outstanding people in the teaching role is the key here.
- School #4 It has improved since the beginning of the year. We have 98-99% holding power for LEP students.

Demonstrating increased competency in instruction of LEP students?

- School #1 This is reflected in the attitude of students, teachers, and retention of students.
- School #2 ESL training has helped out a lot, especially the content area teachers. I think this is due to both training and workshops and the techniques to overcome fear. Teachers are requesting more LEP students.
- School #3 This is difficult to answer.
- School #4 They work very closely with students. Teachers are still in the training process, and not all LEP students are with trained teachers. However, LEP students receive instruction in the basic academic areas with trained teachers.

2. Do you feel Title VII has impacted LEP student attendance?

Yes /// No
Comments:

- School #1 Yes, significantly. It has been a tremendous over the last couple of years.
- School #2 Yes, student aides have improved self-concepts. Title VII funds and training have helped a great deal with the LEP population, the majority of which are Hispanic.
- School #3 It has had a great deal to do with their attendance. But, it may be due a great deal to the teachers, too.
- School #4 They have good attendance. They're enriched. They feel that school is home. They want to learn.

3. In your opinion, has Title VII positively impacted the self-concept and school attitude of LEP students?

Yes, A Lot

To Some Extent

Not At All

1 ///

2

3

Comments:

School #1 Students find themselves fitting into a program and getting the skills they need. The Hispanic students' organization is active and Title VII project teachers are the majority of those helping the students plan the Cinco de Mayo celebration.

School #2 Yes, a lot, through wonderful principal backing and teachers who have attended workshops.

School #3 (No additional comment.)

School #4 Absolutely.

4. In your opinion, what impact has Title VII had upon the acquisition of English language skills and academic content achievement of LEP students?

School #1 It has undoubtedly made a significant impact upon students by helping teachers help students.

School #2 We will be able to have a more objective report after ITBS testing. The ESL teacher breaks up his class into three groups with the Title VII tutor, another university tutor from a different education class, and himself. Tutors are a great help.

School #3 Considerable. This is because of the feedback the ESL teacher gets from the other five teachers who instruct LEP students.

School #4 Students are now making the honor roll. Students have made documented gains in reading.

5. What coordination are you aware of that has occurred among ESL and content area teachers?

Has it improved? Yes /// No 1

Is it adequate? Yes /// No Yes, but might not be 1

Comments:

School #1 Project Assist is also helping LEP students. Title VII teachers are sharing concerns and ideas with Project Assist teachers.

School #2 It was good but now it's even better. Teachers get together to place students, paving the way for student transition, coordination of materials. Three times a week teachers stay over to give help to students. Coordination may not be adequate because of time constraints. No time is allotted for coordination. It is just squeezed in at present.

School #3 The ESL teacher works extremely well with teachers of LEP students.

School #4 This has been a year of implementation. Our attendance rate and scholastic success has been noted by TBE. The coordination is good but more is still needed.

6. Did any problem(s) occur which could impact Title VII program outcomes on your campus (teacher ratings, achievement of students)?

School #1 No.

School #2 Hard to say. May be better observed by the central administration. Seemed fine here on the receiving end. We want more teachers. Bilingual teachers have the most students. One class is at 36 students.

School #3 The major problem was distribution of materials. When you called to request materials, they had more of what you had, not what you needed.

School #4 At the beginning there was some resistance from the teachers. We did not have enough time to do adequate public relations.

7. How successful do you believe each of the Title VII components were this year?

	Completely 1	Mostly 2	Somewhat 3	Not At All 4	
Staff Development			1	2 ///	3 4
Tutors		No Idea 1	1 //	2	3 4 N.A. 1
Curriculum Development			1	2 ///	3/ 4

Comments:

School #1 Tutors are great. Teachers are still saying more, more for curriculum development.

School #2 (No additional comment).

School #3 Only six to eight teachers are involved in staff development, although they have discussed this with other teachers.

School #4 It's hard to say, because we're in the early stages of implementation.

8. What recommendations do you have for modifications or improvement of the Title VII program in terms of:

Staff Development?

School #1 It depends on who moderates it. Teachers need refresher courses, a boost from time to time. "Where am I now? Where do I need to go?" The most critical area is reading comprehension.

School #2 Involve all my staff. It should not be voluntary (workshops). We are a special school. The students should be sent home early so that the teachers are not giving more extra time. Workshops should be held three times a year. They should focus on sensitivity and removing fears. Usually the child is so ready to learn. The entire staff should be involved so everyone is able to take kids.

School #3 I don't have any.

School #4 We need more teacher training. Now we have our core people.

Tutors?

School #1 Send more. They're doing very well. They're learning as much as the students.

School #2 More! More contact hours. What we have has been great. Everybody should have them. When the art teacher has two tutors all goes well. If she had them every day--

School #3 (No additional comment.)

School #4 (Not applicable.)

Curriculum Development?

School #1 I don't feel qualified to answer.

School #2 The LEP coordinator and his department were to be paid a flat rate for two weeks in the summer by the district. This does not reflect the many hours of research and planning the project would have necessitated. People burn out when they are not paid a comparable wage for their time and effort and you lose a valuable resource.

School #3 (No additional comment.)

School #4 (No additional comment.)

9. Do you think that other campuses would benefit from having Title VII services available for LEP students?

Yes /// No *Yes, Qualified*

Why or why not?

School #1 They would benefit if they had the situation we have. Without the numbers, it tends to isolate the student. Without enough students, it would probably experience less success.

School #2 I would think so but wouldn't want to give up our program. Maybe for Vietnamese, other LEP's. Our overall enrollment is decreasing but the LEP student population will stay the same or increase. It has been increasing 20 percent per year.

School #3 I would presume so.

School #4 Absolutely. Right now we have a waiting list of students.

10. Overall, do you feel Title VII has had an impact?

School #1 Absolutely. Very positively. The project specialist has done a tremendous job.

School #2 We're definitely better off than before the Title VII program. Our school is more cost effective for impacting LEP students.

School #3 Yes, with our students.

School #4 Definitely.

Coordinator/Specialist Interview Questions

1. Was Title VII implemented as planned?

Completely
1Mostly
2To Some Extent
3Not At All
4

What deviations, discrepancies, and/or modifications have occurred?

Did any problems occur which affected just one or some of the campuses and which could impact program outcomes (teacher ratings, achievement of students)?

2. What expectations did you have for project effectiveness in terms of attendance at inservice, participation in endorsement classes, training outcomes, use of techniques?

Were your expectations met?

Yes _____ No _____
Comments:

3. How well have project teachers implemented Title VII program objectives with LEP students in terms of successes or problems in the following:

Adapting the content areas to meet the needs and levels of the LEP students?

Developing appropriate and varied strategies for evaluation of LEP students?

Decreasing the dropout rate of LEP students?

Demonstrating increasing competency in instruction of LEP students?

4. Do you feel Title VII has impacted LEP student attendance?

Yes _____ No _____

Comments:

5. In your opinion, has Title VII positively impacted the self-concept and school attitude of LEP students?

Yes, A Lot

1

To Some Extent

2

Not At All

3

Comments:

6. What coordination has occurred among ESL and content area teachers?

Has it improved? Yes _____ No _____

Is it adequate? Yes _____ No _____

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Comments:

7. Did Title VII enhance the TBE services for the participating (A & B) Hispanic LEP students?

Yes _____ No _____

Comments:

8. In your opinion, what impact has Title VII had upon the acquisition of English language skills and academic content achievement of LEP students?

9. How successful do you believe each of the Title VII components were this year?

Completely 1	Mostly 2	Somewhat 3	Not At All 4	
Staff Development	1	2	3	4
Tutors	1	2	3	4
Curriculum Development	1	2	3	4

Comments:

10. What recommendations do you have for modifications or improvement of the Title VII program in terms of:

Staff Development?

Tutors?

Curriculum Development?

11. Do you think that other campuses would benefit from having Title VII services available for LEP students?

Yes ____ No ____

Why or why not?

12. How do you think the project has been received at the other four campuses?

Coordinator/Specialist Interview Questions

1. Was Title VII implemented as planned?

Completely

1

Mostly

2

To Some Extent

3

Not At All

4

What deviations, discrepancies, and/or modifications have occurred?

Major program changes did not occur. One of the major changes was that the project specialist was not hired until September 1, the evaluator associate until September 24, and the secretary until October or November, 1985. Also, the original proposal did not specify how the tutor component was to be carried out. There were really no deviations or discrepancies except for the timeline which was due to the grant coming in 6 months later than expected. Projected modifications in the designated project schools were sent to Washington for approval.

Did any problems occur which affected just one or some of the campuses and which could impact program outcomes (teacher ratings, achievement of students)?

There were none.

2. What expectations did you have for project effectiveness in terms of attendance at inservice, participation in endorsement classes, training outcomes, use of techniques?

The grant specified paid tuition would be provided for 15 teachers. This was met. We had a very good cross section of staff attending workshop sessions. The videotapes (used in the endorsement classes) give good evidence of teaching techniques. The sensitivity and knowledge is there. Over 90 percent are applying techniques and experiencing success.

Were your expectations met?

Yes 11 No

3. How well have project teachers implemented Title VII program objectives with LEP students in terms of successes or problems in the following:

Adapting the content areas to meet the needs and levels of the LEP students?

They've adapted them well.

Developing appropriate and varied strategies for evaluation of LEP students?

This is not a current objective of the program, but it is a number one priority for next year. We want to do an on-site inservice in this area. We're already working with individual teachers now, modeling student evaluation for them. There is a tremendous need for this type of assessment in schools.

Decreasing the dropout rate of LEP students?

I've talked with members of each school and noted what happened to students who were not there for posttesting. Most had moved. There are very, very few dropouts. At Travis and Johnston there are no dropouts. At Anderson there was one dropout and at Murchison there were 11 dropouts.

Demonstrating increasing competency in instruction of LEP students?

Great!

4. Do you feel Title VII has impacted LEP student attendance?

Yes 11 No

Comments:

At Travis the attendance is excellent. I've had minimal make-ups at Travis (posttesting) because students have been there. Attendance has improved over the year at Murchison. I noticed this when I went back to do the posttests. Compared to the beginning of the year, when I had to go back again and again, I only had to go back twice. They still are having problems with the buses and that's probably the number one problem impacting attendance at Murchison. But, the problem is less now than it was at the beginning of the year. Anderson and Johnston have had good attendance, but I don't know whether this has been due to Title VII or not. There are so few LEP students at Johnston and Anderson. They don't volunteer to go into an environment which is not in their language unless they want to be there.

5. In your opinion, has Title VII positively impacted the self-concept and school attitude of LEP students?

Yes, A Lot

To Some Extent

Not At All

①

2

3

Comments:

It has positively impacted the teachers' image of a LEP student and that in turn has to have impacted the student.

6. What coordination has occurred among ESL and content area teachers?

Has it improved? Yes // No Is it adequate? Yes // No **Comments:**

It is adequate but it could always be improved. Videotaping developed a lot of fellowship because teachers had to meet together. This is tied to the endorsement class and coming together to meet for three hours each week. Another example of this is the supplemental materials purchased by Title VII that are available for check out at all the schools.

7. Did Title VII enhance the TBE services for the participating (A & B) Hispanic LEP students?

Yes // No **Comments:**

Definitely.

8. In your opinion, what impact has Title VII had upon the acquisition of English language skills and academic content achievement of LEP students?

The students' scores (posttest) will show it. Tutors have had a big impact. They have clarified assignments and have helped with homework.

9. How successful do you believe each of the Title VII components were this year?

Completely 1	Mostly 2	Somewhat 3	Not At All 4	
Staff Development	①	2	3	4
Tutors	①	2	3	4
Curriculum Development	1	②	3	4

Comments:

The curriculum development is by no means complete but has an excellent start. The videotapes will be invaluable. We're happy with what has been done but there is more to be accomplished.

10. What recommendations do you have for modifications or improvement of the Title VII program in terms of:

Staff Development?

The endorsement program should be continued. There should be an advanced workshop series to include evaluation of students, planning and organization of instruction, demonstration of teaching strategies through videotaping, and computer assisted instruction and evaluation of computer software.

Tutors?

More! St. Edward's University will participate next year. It is not as effective to have the university tutors put in large blocks of time in the beginning. It is better to assign one tutor to one teacher for one period for a full semester.

Curriculum Development?

We need to pull it together into a usable form in the second year.

11. Do you think that other campuses would benefit from having Title VII services available for LEP students?

Yes // No

Why or why not?

Other LEP language groups (non-Hispanic) would benefit. Almost all A&B Hispanic LEP students are now being served.

12. How do you think the project has been received at the four campuses?

It has been received extremely well by principals, content area teachers, ESL teachers, university staffs, and the parent community.

Title VII Program

TEACHER SURVEY

Appendix F

TEACHER SURVEY

Purpose

Questions were included in the districtwide survey for teachers and administrators of Title VII program student participants. Responses provided information concerning the following questions:

Decision Question D1: Should the Title VII Program be continued as it is, modified, or discontinued?

Evaluation Question D1-8. What concerns/strengths about the implementation of the project were identified by project teachers?

Evaluation Question D1-9. Was the program implemented as planned?

Information Need I2. Did the project meet its objectives?

Procedure

Surveys

One half of the AISD's teachers are surveyed in the fall and one half in the spring with questions on a wide variety of topics. Teacher Survey questions were generated by the Office of Research and Evaluation (ORE) staff with input from the program director and program specialist. These questions were designed to elicit information about the implementation and effectiveness of the three program components: staff training, tutorial services, and curriculum development. The Teacher Survey questions were then passed on to the evaluation associate for Management Information who sends out surveys annually to about one half of all teachers and administrators in Austin Independent School District (AISD). (See Attachment F-1 for details.)

The Teacher Survey was sent to project participant teachers in the Districtwide Survey on April 28, 1986. This year the surveys went out later than other years. The surveys were attached to a memo that explained why the surveys were late (see Attachment F-2).

It should be noted that the item response rate for endorsement teachers and teachers with tutors was lower than the reported general response rate of all teachers and administrators surveyed. Whereas the overall response rate was as high as 98% (See Attachment F-1), item responses of the endorsement teachers ranged between 32% and 52%; out of 23 asked, 9-12 responded. Of the surveyed teachers with tutors, item responses were received from 45%; 9 out of 20 responded. Subsequently, sample sizes were small and usually represent 40% to 50% of those surveyed. It is not clear why the response rate was not higher.

A low response rate was also noted for open-ended questions sent to endorsement teachers which addressed training effectiveness (See Figure F-3). As can be seen, less than one-third of those surveyed responded (7 out of 23 teachers). Whether these respondents were representative of the total sample of endorsement teachers and/or only those who had stronger motivation to comply with the survey request is questionable. This makes interpretation difficult; subsequently, the responses are left unsummarized.

Also, the Likert-type response scale used in the tutor survey items was altered by the district management evaluation associate or program analyst. This caused a problem in the case of three items (Figure F-1; Items 118, 119, & 120) where the original five point scale, ranging from "strongly agree to strongly disagree," was changed to a four point scale, ranging from "greatly to none" (greatly, some, little, none). It was unclear whether an answer of "some" was a positive or neutral response. Also, there seemed to be a big jump between the choices of "greatly" and "some".

Items concerning program objectives (Items 134-136) were sent to endorsement teachers only. If teachers with tutors had been asked about the effectiveness of program objectives, ratings might have been higher. Teachers with tutors generally indicated that the tutor component contributed to student gains in academic and English language skills.

Sample

Items given to the two groups varied.

GROUP	ITEM NUMBERS
Teachers with Tutors (Figure F-1)	113-120
Endorsement Teachers(Figure F-2)*	121-138

Two teachers were participants of both groups and received all questions.

*Endorsement teachers' responses to open-ended questions are shown in Figure F-3.

Results

Evaluation Question D1-8: What concerns/strengths about the implementation of the project were identified by project teachers?

Project endorsement teachers were surveyed; opinions from this group were mixed about training effectiveness.

- Half of the endorsement indicated that their training was almost always or frequently interesting and informative; 50% said this was sometimes or rarely true. (Figure F-2; Item 122, N=10)
- Of those responding, 40% (N=4) of the teachers asked indicated that their trainers were almost always or frequently knowledgeable and well prepared. However, 60% (N=6) of the total said that this was sometimes true. (Figure F-2; Item 121, N=10)
- Half of the teachers asked indicated that their training almost always or frequently reinforced old skills; 50% responded that this was sometimes the case. (Figure F-2; Item 125, N=10)
- Of the teachers responding, as many indicated (N=3) that their training almost always or frequently presented new skills as responded (N=3) that it rarely or almost never did (30% each). The remaining 40% (N=4) responded that this was sometimes the case. (Figure F-2; Item 124, N=10)
- More than one-fourth (27.3%, N=4) indicated that Title VII training information was almost always or frequently useful in the classroom; 72.7% (N=8) said that this was sometimes true. (Figure F-2; Item 126, N=11)
- A majority of the teachers (63.6%, N=7) responded that the students sometimes benefitted because they had received Title VII training. Of the remaining 4 respondents, as many said (18.2%) this was frequently the case as indicated (18.2%) this was rarely or almost never true. (Figure F-2; Item 128, N=11)
- One-third of the teachers (33.45%, N=4) indicated that the program was implemented as planned; 58.3% (N=7) said that this was sometimes true and 8.3% (N=1) responded that this was rarely the case. (Figure F-2; Item 134, N=12)
- The percentage of teachers who indicated they used these techniques almost always or frequently was:
 - Whole class - 63.1% (N=11),
 - Large group (more than 7) - 54.6% (N=11),
 - Small group (Less than 7) - 27.3% (N=11),
 - Individual instruction - 30.8% (N=13),
 - Student pairs - 15.4% (N=13). (Figure F-2, Items 129-133)

Thus, whole group and large group instruction were the most common.

Evaluation Question D1-9. Was the program implemented as planned?**Information Need I2.** Did the project meet its objectives?

Objectives were related to the effectiveness of the Title VII program in improving the English language proficiency and academic skills of program LEP students. One of the program components, tutor implementation was designed to assist program LEP students in meeting these goals. Questions concerning tutor effectiveness were specific; other questions on the survey were more general, dealing with the implementation of the program. All responses reflect teacher opinion. This information may be helpful in understanding the results.

Teachers who had tutors for at least part of one school semester were surveyed. They were generally positive about the use of tutors. On the following item responses N=9.

- Two-thirds of the responding teachers (66.6%, N=6) indicated that as a result of working with Title VII tutors, students had greatly or somewhat improved their English skills. However, 22.2% (N=2) of the teachers said there was little improvement; 11.1% (N=1) indicated that they saw none. (Figure F-1, Item 118)
- Most of the teachers (88.8%, N=8) indicated that their students had improved in academic skills as a result of working with tutors; 11% (N=1) said that they saw little improvement. (Figure F-1, Item 119)
- Most of the teachers (77.7%, N=7)) indicated that their students' attitudes toward learning had greatly or somewhat improved as a result of working with tutors; 22.2% (N=2) said they saw little improvement. (Figure F-1; Item, 120, N=9)
- Most of the responding teachers indicated that their tutors were almost always or usually:
 - knowledgeable (66.6%; N=6),)
 - well prepared (66.6%; N=6),)
 - reliable (77.7%; N=7),)
 - positive in their interactions (88.9%; N=8). (Figure F-1, Items 114-117)

The remaining teachers indicated that these statements were sometimes true.

Project endorsement teachers were also surveyed about more general program objectives.

- Three-quarters of the teachers responding (N=9), indicated that Title VII had been effective almost always or frequently in helping LEP students acquire English language skills; 25% (N=3) said this was sometimes true. (Figure F-2; Item 136, N=12)
- Over three-quarters of the teachers (77.7%, N=7) responded that the program was almost always or frequently effective in promoting the academic achievement of Hispanic LEP students. All other teachers indicated (22.2%, N=2)) that this was sometimes true. (Figure F-2; Item 137, N=9)
- Half of those responding indicated that Title VII almost always or frequently facilitated better coordination among ESL and content area teachers for assisting LEP student learning; 50% said that this was sometimes the case. (Figure F-2; Item 138, N=12)
- Over two-thirds of the teachers indicated (72.8%, N=8) that other secondary campuses could almost always or frequently benefit from having Title VII available for LEP students; 28.2% (N=3) said that this would sometimes be true. (Figure F-2; Item 135, N=11)

The findings can be summarized by the following:

- Teachers who had tutors were generally very positive about their impact.
- Endorsement teachers were unsure about the effectiveness of the training component. The majority said their students had sometimes benefitted because of their teacher training. Slightly more than one-fourth indicated that training information was useful in the classroom.
- At least three-quarters of the endorsement teachers indicated that LEP students' academic and English language skills had been positively impacted by Title VII Program objectives.

113. TITLE VII TUTORS ARE HELPFUL TO MY STUDENTS.

A. ALWAYS B. USUALLY C. SOMETIMES D. SELDOM E. NEVER

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	13/20	5 38.5%	4 30.8%	1 7.7%	0 0.0%	3 23.1%
JR HIGH	4	2 50.0%	1 25.0%	1 25.0%	0 0.0%	0 0.0%
HIGH SCH	9	3 33.3%	3 33.3%	0 0.0%	0 0.0%	3 33.3%
SECONDARY	13	5 38.5%	4 30.8%	1 7.7%	0 0.0%	3 23.1%

114. TITLE VII TUTORS ARE KNOWLEDGEABLE.

A. ALWAYS B. USUALLY C. SOMETIMES D. SELDOM E. NEVER

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	9/20	3 33.3%	3 33.3%	3 33.3%	0 0.0%	0 0.0%
JR HIGH	2	0 0.0%	2 100.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	7	3 42.9%	1 14.3%	3 42.9%	0 0.0%	0 0.0%
SECONDARY	9	3 33.3%	3 33.3%	3 33.3%	0 0.0%	0 0.0%

Figure F-1. RESPONSES OF TEACHERS WITH TUTORS, 1986 ITEMS ON TITLE VII PROGRAMS. (Page 1 of 4)

115. TITLE VII TUTORS ARE WELL PREPARED.

A.ALWAYS B.USUALLY C.SOMETIMES D.SELDOM E.NEVER

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	9/20	4 44.4%	2 22.2%	3 33.3%	0 0.0%	0 0.0%
JR HIGH	2	1 50.0%	1 50.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	7	3 42.9%	1 14.3%	3 42.9%	0 0.0%	0 0.0%
SECONDARY	9	4 44.4%	2 22.2%	3 33.3%	0 0.0%	0 0.0%

116. TITLE VII TUTORS ARE RELIABLE.

A.ALWAYS B.USUALLY C.SOMETIMES D.SELDOM E.NEVER

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	9/20	4 44.4%	3 33.3%	2 22.2%	0 0.0%	0 0.0%
JR HIGH	2	2 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	7	2 28.6%	3 42.9%	2 28.6%	0 0.0%	0 0.0%
SECONDARY	9	4 44.4%	3 33.3%	2 22.2%	0 0.0%	0 0.0%

Figure F-1. (Page 2 of 4)

117. TITLE VII TUTORS HAVE POSITIVE ATTITUDES.

A. ALWAYS B. USUALLY C. SOMETIMES D. SELDOM E. NEVER

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	9/20	5 55.6%	3 33.3%	1 11.1%	0 0.0%	0 0.0%
JR HIGH	2	1 50.0%	1 50.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	7	4 57.1%	2 28.6%	1 14.3%	0 0.0%	0 0.0%
SECONDARY	9	5 55.6%	3 33.3%	1 11.1%	0 0.0%	0 0.0%

118. AS A RESULT OF WORKING WITH TITLE VII TUTORS, MY STUDENTS HAVE IMPROVED THEIR ENGLISH SKILLS.

A. GREATLY B. SOME C. LITTLE D. NONE

	NUMBER OF RESPONSES	A	B	C	D
TOTALS	9/20	3 33.3%	3 33.3%	2 22.2%	1 11.1%
JR HIGH	2	0 0.0%	2 100.0%	0 0.0%	0 0.0%
HIGH SCH	7	3 42.9%	1 14.3%	2 28.6%	1 14.3%
SECONDARY	9	3 33.3%	3 33.3%	2 22.2%	1 11.1%

Figure F-1. (Page 3 of 4)

119. AS A RESULT OF WORKING WITH TITLE VII TUTORS, MY STUDENTS HAVE IMPROVED IN ACADEMIC SKILLS.

A. GREATLY B. SOME C. LITTLE D. NONE

	NUMBER OF RESPONSES	A	B	C	D
TOTALS	9/20	4 44.4%	4 44.4%	1 11.1%	0 0.0%
JR HIGH	2	1 50.0%	1 50.0%	0 0.0%	0 0.0%
HIGH SCH	7	3 42.9%	3 42.9%	1 14.3%	0 0.0%
SECONDARY	9	4 44.4%	4 44.4%	1 11.1%	0 0.0%

120. AS A RESULT OF WORKING WITH TITLE VII TUTORS, MY STUDENTS HAVE IMPROVED ATTITUDES TOWARD LEARNING.

A. GREATLY B. SOME C. LITTLE D. NONE

	NUMBER OF RESPONSES	A	B	C	D
TOTALS	9/20	3 33.3%	4 44.4%	2 22.2%	0 0.0%
JR HIGH	2	0 0.0%	2 100.0%	0 0.0%	0 0.0%
HIGH SCH	7	3 42.9%	2 28.6%	2 28.6%	0 0.0%
SECONDARY	9	3 33.3%	4 44.4%	2 22.2%	0 0.0%

Figure F-1. (Page 4 of 4)

121. TITLE VII ENDORSEMENT AND INSERVICE TRAINERS WERE
KNOWLEDGEABLE AND WELL PREPARED.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	10 / 23	2 20.0%	2 20.0%	6 60.0%	0 0.0%	0 0.0%
JR HIGH	1	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%
HIGH SCH	9	2 22.2%	2 22.2%	5 55.6%	0 0.0%	0 0.0%
SECONDARY	10	2 20.0%	2 20.0%	6 60.0%	0 0.0%	0 0.0%

122. TITLE VII ENDORSEMENT AND INSERVICE TRAINING WAS
INTERESTING AND INFORMATIVE.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	10 / 23	1 10.0%	4 40.0%	4 40.0%	1 10.0%	0 0.0%
JR HIGH	1	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%
HIGH SCH	9	1 11.1%	4 44.4%	3 33.3%	1 11.1%	0 0.0%
SECONDARY	10	1 10.0%	4 40.0%	4 40.0%	1 10.0%	0 0.0%

Figure F-2. RESPONSES OF ENDORSEMENT TEACHERS, 1986 ITEMS ON TITLE VII PROGRAM. (Page 1 of 9)

123. THE CONNECTION BETWEEN THEORY AND APPLICATION FOR
TITLE VII TRAINING WAS CLEARLY STATED.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	10/ 23	1 10.0%	2 20.0%	6 60.0%	1 10.0%	0 0.0%
JR HIGH	1	0 0.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%
HIGH SCH	9	1 11.1%	2 22.2%	5 55.6%	1 11.1%	0 0.0%
SECONDARY	10	1 10.0%	2 20.0%	6 60.0%	1 10.0%	0 0.0%

124. TITLE VII ENDORSEMENT AND INSERVICE TRAINING
PRESENTED NEW SKILLS.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	10/ 23	1 10.0%	2 20.0%	4 40.0%	2 20.0%	1 10.0%
JR HIGH	1	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	9	0 0.0%	2 22.2%	4 44.4%	2 22.2%	1 11.1%
SECONDARY	10	1 10.0%	2 20.0%	4 40.0%	2 20.0%	1 10.0%

Figure F-2. (Page 2 of 9)

125. TITLE VII ENDORSEMENT AND INSERVICE TRAINING
REINFORCED OLD SKILLS.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	10/23	3 30.0%	2 20.0%	5 50.0%	0 0.0%	0 0.0%
JR HIGH	1	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	9	2 22.2%	2 22.2%	5 55.6%	0 0.0%	0 0.0%
SECONDARY	10	3 30.0%	2 20.0%	5 50.0%	0 0.0%	0 0.0%

126. I COULD APPLY THE INFORMATION PROVIDED BY TITLE VII
INSERVICE IN THE CLASSROOM.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11/11	2 18.2%	1 9.1%	8 72.7%	0 0.0%	0 0.0%
JR HIGH	2	1 50.0%	1 50.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	9	1 11.1%	0 0.0%	8 88.9%	0 0.0%	0 0.0%
SECONDARY	11	2 18.2%	1 9.1%	8 72.7%	0 0.0%	0 0.0%

Figure F-2. (Page 3 of 9)

127. THE TECHNIQUES OF TITLE VII INSERVICE WORKED WITH GOOD RESULTS.

		A. ALMOST ALWAYS	C. SOMETIMES	E. ALMOST NEVER		
		B. FREQUENTLY	D. RARELY			
	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11/23	0 0.0%	2 18.2%	9 81.8%	0 0.0%	0 0.0%
JR HIGH	2	0 0.0%	1 50.0%	1 50.0%	0 0.0%	0 0.0%
HIGH SCH	9	0 0.0%	1 11.1%	8 88.9%	0 0.0%	0 0.0%
SECONDARY	11	0 0.0%	2 18.2%	9 81.8%	0 0.0%	0 0.0%

128. THE STUDENTS BENEFITTED BECAUSE I HAD RECEIVED TITLE VII TRAINING.

		A. ALMOST ALWAYS	C. SOMETIMES	E. ALMOST NEVER		
		B. FREQUENTLY	D. RARELY			
	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11/23	0 0.0%	2 18.2%	7 63.6%	1 9.1%	1 9.1%
JR HIGH	2	0 0.0%	1 50.0%	1 50.0%	0 0.0%	0 0.0%
HIGH SCH	9	0 0.0%	1 11.1%	6 66.7%	1 11.1%	1 11.1%
SECONDARY	11	0 0.0%	2 18.2%	7 63.6%	1 9.1%	1 9.1%

Figure F-2. (Page 4 of 9)

129. HOW OFTEN DO YOU USE WHOLE CLASS INSTRUCTION WHEN INSTRUCTING LEP STUDENTS?

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11	3 27.3%	4 36.4%	3 27.3%	1 9.1%	0 0.0%
JR HIGH	2	0 0.0%	1 50.0%	1 50.0%	0 0.0%	0 0.0%
HIGH SCH	9	3 33.3%	3 33.3%	2 22.2%	1 11.1%	0 0.0%
SECONDARY	11	3 27.3%	4 36.4%	3 27.3%	1 9.1%	0 0.0%

130. HOW OFTEN DO YOU USE LARGE GROUPS (8 OR MORE) WHEN INSTRUCTING LEP STUDENTS?

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11	2 18.2%	4 36.4%	3 27.3%	1 9.1%	1 9.1%
JR HIGH	2	0 0.0%	2 100.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	9	2 22.2%	2 22.2%	3 33.3%	1 11.1%	1 11.1%
SECONDARY	11	2 18.2%	4 36.4%	3 27.3%	1 9.1%	1 9.1%

Figure F-2. (Page 5 of 9)

131. HOW OFTEN DO YOU USE SMALL GROUPS (7 OR LESS) WHEN INSTRUCTING LEP STUDENTS?

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11	0 0.0%	3 27.3%	6 54.5%	2 18.2%	0 0.0%
JR HIGH	2	0 0.0%	1 50.0%	1 50.0%	0 0.0%	0 0.0%
HIGH SCH	9	0 0.0%	2 22.2%	5 55.6%	2 22.2%	0 0.0%
SECONDARY	11	0 0.0%	3 27.3%	6 54.5%	2 18.2%	0 0.0%

132. HOW OFTEN DO YOU USE PAIRS WHEN INSTRUCTING LEP STUDENTS?

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	13	1 7.7%	1 7.7%	7 53.8%	3 23.1%	1 7.7%
JR HIGH	3	0 0.0%	0 0.0%	3 100.0%	0 0.0%	0 0.0%
HIGH SCH	10	1 10.0%	1 10.0%	4 40.0%	3 30.0%	1 10.0%
SECONDARY	13	1 7.7%	1 7.7%	7 53.8%	3 23.1%	1 7.7%

Figure F-2. (Page 6 of 9)

133. HOW OFTEN DO YOU USE INDIVIDUAL INSTRUCTION WITH
LEP STUDENTS?

		A. ALMOST ALWAYS	C. SOMETIMES	E. ALMOST NEVER		
		B. FREQUENTLY	D. RARELY			
	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	13	0 0.0%	4 30.8%	7 53.8%	0 0.0%	2 15.4%
JR HIGH	3	0 0.0%	1 33.3%	2 66.7%	0 0.0%	0 0.0%
HIGH SCH	10	0 0.0%	3 30.0%	5 50.0%	0 0.0%	2 20.0%
SECONDARY	13	0 0.0%	4 30.8%	7 53.8%	0 0.0%	2 15.4%

134. THE TITLE VII PROGRAM WAS IMPLEMENTED AS PLANNED
AT MY CAMPUS.

		A. ALMOST ALWAYS	C. SOMETIMES	E. ALMOST NEVER		
		B. FREQUENTLY	D. RARELY			
	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	12	2 16.7%	2 16.7%	7 58.3%	1 8.3%	0 0.0%
JR HIGH	3	1 33.3%	1 33.3%	1 33.3%	0 0.0%	0 0.0%
HIGH SCH	9	1 11.1%	1 11.1%	6 66.7%	1 11.1%	0 0.0%
SECONDARY	12	2 16.7%	2 16.7%	7 58.3%	1 8.3%	0 0.0%

Figure F-2. (Page 7 of 9)

135. OTHER SECONDARY CAMPUSES COULD BENEFIT FROM HAVING
TITLE VII SERVICES AVAILABLE FOR LEP STUDENTS.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	11/23	4 36.4%	4 36.4%	3 27.3%	0 0.0%	0 0.0%
JR HIGH	2	1 50.0%	1 50.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	9	3 33.3%	3 33.3%	3 33.3%	0 0.0%	0 0.0%
SECONDARY	11	4 36.4%	4 36.4%	3 27.3%	0 0.0%	0 0.0%

136. TITLE VII HAS BEEN EFFECTIVE IN HELPING HISPANIC
LEP STUDENTS ACQUIRE ENGLISH LANGUAGE SKILLS.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	12/23	2 16.7%	7 58.3%	3 25.0%	0 0.0%	0 0.0%
JR HIGH	3	0 0.0%	3 100.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	9	2 22.2%	4 44.4%	3 33.3%	0 0.0%	0 0.0%
SECONDARY	12	2 16.7%	7 58.3%	3 25.0%	0 0.0%	0 0.0%

Figure F-2. (Page 8 of 9)

137. TITLE VII IS EFFECTIVE IN PROMOTING THE ACADEMIC
ACHIEVEMENT OF HISPANIC LEP STUDENTS.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	9/23	3 33.3%	4 44.4%	2 22.2%	0 0.0%	0 0.0%
JR HIGH	1	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%
HIGH SCH	8	3 37.5%	3 37.5%	2 25.0%	0 0.0%	0 0.0%
SECONDARY	9	3 33.3%	4 44.4%	2 22.2%	0 0.0%	0 0.0%

138. TITLE VII HAS FACILITATED BETTER COORDINATION
AMONG ESL AND CONTENT AREA TEACHERS FOR ASSISTING
LEP STUDENT LEARNING.

A. ALMOST ALWAYS C. SOMETIMES E. ALMOST NEVER
B. FREQUENTLY D. RARELY

	NUMBER OF RESPONSES	A	B	C	D	E
TOTALS	12/23	4 33.3%	2 16.7%	6 50.0%	0 0.0%	0 0.0%
JR HIGH	2	0 0.0%	0 0.0%	2 100.0%	0 0.0%	0 0.0%
HIGH SCH	10	4 40.0%	2 20.0%	4 40.0%	0 0.0%	0 0.0%
SECONDARY	12	4 33.3%	2 16.7%	6 50.0%	0 0.0%	0 0.0%

Figure F-2. (Page 9 of 9)

RESPONSES TO OPEN-ENDED QUESTIONS ON TEACHER SURVEY
(23 possible respondents)

1. Do you find you are using new techniques to instruct LEP students because of Title VII training? Yes 5 No 1 If so, Please name.
 - o Respondent #1 - No.
 - o Respondent #2 - Yes.
 - Lecture in small chunks of material
 - From time to time, pair LEP students with nonLEP students
 - Make vocabulary list every so often
 - o Respondent #3 - Yes.
 - More reading
 - o Respondent #4 - Yes.
 - Small group activity demonstrated in class
 - o Respondent #5 - Yes.
 - Using slow, clear wording to give instruction
 - Location of teacher in relation to LEP student
 - Many more
 - o Respondent #6 - Yes.
 - One-to-one instruction
 - The magic circle
 - Peer group instruction
 - o Respondent #7 - No.
2. Are you using previously employed techniques now more than before? Yes 6 No 1 If so, please name.
 - o Respondent #1 - Yes.
 - Foreign language methodology
 - o Respondent #2 - No.
 - o Respondent #3 - Yes.
 - o Respondent #4 - Yes.
 - o Respondent #5 - Yes.
 - Group answer or repetition first, then individual use of concrete objects, especially to introduce a new concept

Figure F-3. (Page 1 of 3)

- o Respondent #6 - Yes.
 - More clearly define objectives
 - More practice
 - o Respondent #7 - Yes.
 - Translation from English to Spanish
 - More repetition of instructions
3. I have sufficient quantities of instructional materials in English and Spanish which address a range of readability levels. Yes /
 No 6 Comments:
- o Respondent #1 - No.
 - o Respondent #2 - Yes.
 - o Respondent #3 - No.
 - I do not have enough!
 - o Respondent #4 - No.
 - o Respondent #5 - No.
 - o Respondent #6 - No.
 - I teach vocational Education (CVAE Food Service) so I adapt most of my material to suit my needs.
 - o Respondent #7 - No.
 - Most materials I have are for CLA classes and for ESL. No materials in Spanish are available for me. I do have a wonderful working relationship with foreign language colleagues.
4. Describe any particular methods or rules you use to encourage your LEP students to use more English:
- o Respondent #1
 - Have them define words in English rather than translate them into their native language
 - Use only English in the classroom
 - Give them plenty of opportunity to speak
 - o Respondent #2
 - One-to-one instruction
 - Magic circle
 - Peer group instruction

Figure F-3. (Page 2 of 3)

- o Respondent #3
 - Encourage LEP student to communicate with fellow friend in English
 - Ask questions/give responses in English
 - Encourage student to try to read newspaper and other English materials
- o Respondent #4
 - No comment.
- o Respondent #5
 - Vocabulary pronunciation
 - Questions are to be asked in English if possible
 - Instructions are give in English, too
 - Read to understand and learn new words
- o Respondent #6
 - Have other students be a model for the LEP students
 - Give instruction in English only
- o Respondent #7
 - No comment.

Figure F-3. (Page 3 of 3)

Office of Research and Evaluation Staff Surveys

The Office of Research and Evaluation (ORE) regularly conducts fall and spring surveys of District teachers and administrators. In 1985-86 the fall surveys included a random 50% sample of teachers (excluding Chapter 1, Chapter 1 Migrant, and State Compensatory Education teachers) and all campus administrators. Forty four items were assigned to 1781 teachers and 43 items to 153 administrators on the fall surveys. For the spring surveys, all teachers not sampled in the fall were included, along with a few teachers who had been surveyed in the fall who were involved in programs being evaluated. All campus administrators were surveyed in the spring as well as the fall. In May 148 items were assigned to 1894 teachers, and 29 items to 155 campus administrators.

Survey items were solicited from central administrators, program staff, and ORE staff in fall 1985. The fall surveys included primarily items on general topics, and the spring surveys included items needed for program evaluations.

Survey forms were computer printed on scannable forms, with each staff member assigned appropriate items on a unique form. A complete outline of the techniques used appears in ORE publication #83.31, Appendices M and N. Each survey form was printed with a sequence number which allowed for matching surveys with mailing labels for sending the surveys through school mail. The sequence number also allowed the computer scanning and identification of items.

Surveys were scanned ten days after the first mailing, and a second form printed "REMINDER" was sent to each person who had not already returned a form. Ten days after reminders were sent, the remaining surveys were scanned, responses analyzed, and printouts of results produced. The item response rates ranged from 65% to 98%. Printouts of items were sent directly to staff members who requested the information on January 10 for the fall surveys and May 30 for the spring surveys.

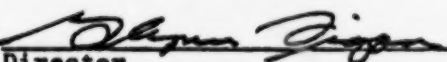
AUSTIN INDEPENDENT SCHOOL DISTRICT
Department of Management Information

April 28, 1986

To: Teachers and Campus Administrators
From: Elaine Jackson
Subject: Apologies

Attached is the your regular spring survey from the Office of Research and Evaluation (ORE). We know it is too late in the school year to send surveys out to campus personnel. Unfortunately, on top of all the other assorted problems our District has been plagued with this year, the survey printing had to be completely reprogrammed this spring, and so it is late. We have eliminated all "general" questions from the survey, and kept only those items about programs you are involved with this year. For some of the small programs, this is the only source of data for the evaluator who will be writing up the program report, so we could not eliminate the survey.

Because the survey is still important, it would help everyone if you would just sit down and complete it now, and save yourself from getting a reminder and wondering what you did with the first one. We do know this is too much to ask of you, but we must. Please feel free to write any comments you would like on the bottom or back of this sheet, and return it with your survey. All of your responses and comments are confidential (the number on the survey is to indicate your grade level, location, and program). We do appreciate your help!

Approved: 
Director
Department of Management Information

Title VII Program

TUTOR RECORDS

Appendix G

200

APPENDIX G

1

TUTOR RECORDS

Purpose

University of Texas students who assisted LEP students on an individual basis in the content areas maintained tutor records which provided information concerning:

Decision Question D1: Should the Title VII program be continued as it is, modified, or discontinued?

Evaluation Question D1-5. How do the English proficiency and achievement gains of students receiving tutoring compare to students who were not tutored? (Johnston experimental versus control group) (Murchison experimental versus control group)

Information Need I2. Did the project meet its objectives?

Information Need I3. In which content areas did project participants receive tutoring services?

Procedure

Students Served. Hispanic LEP students at Murchison Junior High and Johnston High School were assisted by University tutors during the fall school semester of 1985. During the spring semester of 1986, a third school, Anderson High, was added to those schools offering tutorial services to project LEP students.

How Tutoring Was Carried Out. English speaking tutors were able to work with Hispanic LEP students by adapting and simplifying materials, e.g., with illustrations, note-taking, clarification of vocabulary, utilization of Spanish/English dictionaries, and identification of main concepts.

Data Collection. Two sessions of University of Texas students, enrolled in multicultural education courses, assisted project LEP students as tutors. Record forms which they maintained first semester provided the data about those students served between the first week of October and December 1985. However, not all record forms were received from tutors by January 28, 1986. Therefore, during the second semester both the tutors and their receiving teacher jointly shared the record-keeping responsibilities.

Results

Information Need 13. In which content areas did project participants receive tutoring services?

Hand tallying done by the evaluation associate determined that during school year 1985-86, 76 project LEP students were tutored by 48 tutors in eighteen subjects.

- Mathematics
- English
- Computers
- Science
- ESL
- Social Studies
- Reading
- Art
- Government
- Biology
- World Geography
- Algebra
- American History
- World History
- Geography
- Geography
- Texas History
- Earth Science

Some of these students received tutoring in more than one area. In order to obtain this count, the evaluation associate created a SAS program (SA-BY0010205) using input from the tutor data file (SA-BY0010105) and a SAS PROC FREQ was run. Thus, in a duplicated count, 122 students were tutored in subjects in the content areas of reading, language, mathematics, social studies, and science. (See Figure 1 below.)

SUBJECT	GROUP	FREQUENCY	PERCENT
Reading	Nontutored	153	90.533
	Tutored	16	9.467
Language	Nontutored	118	69.822
	Tutored	51	30.178
Mathematics	Nontutored	149	88.166
	Tutored	20	11.834
Social Studies	Nontutored	151	89.349
	Tutored	18	10.651
Science	Nontutored	152	89.941
	Tutored	17	10.059

Figure 1. BREAKDOWN OF 122 STUDENTS TUTORED (DUPLICATED COUNT) BY CONTENT AREAS. Frequency and percent of those tutored is compared to that of the nontutored. Total number of LEP students available to be tutored was 169.

As can be seen in Figure 1, project LEP students received the most assistance in language; 30 percent were tutored. Approximately 10 percent of the LEP students were tutored in each of the other subjects-- reading, mathematics, social studies, and science. Also, some of the project students received help in more than one subject.

Evaluation Question D1-5. How do the English proficiency and achievement gains of students receiving tutoring compare to students who were not tutored? (Johnston experimental versus control group; Murchison experimental versus control group).

In order to answer this question, the test scores of LEP A and B students on the LAB and ITBS/TAP were examined. On the LAB, which measures English language skills, both tutored and nontutored students showed significant gains ($p \leq .0001$). However, tutored students did not gain significantly more than nontutored students; the overall gains of the tutored students exceeded those of the nontutored by slightly more than one point. This difference was not statistically significant. (See Appendix A, Language Assessment Battery, for more detailed information.)

On the ITBS/TAP, the tutored sample size was small, because the number of enrolled project students with sufficient English proficiency to take the test for both spring, 1985 and spring, 1986 was limited. Thus, the number of tutored LEP students with test scores was less than 10 except in language. Therefore, significance testing was not run. In language, the tutored students' made average gains of .96 grade equivalents (GE) in a year, while nontutored students averaged gains of 1.60 GE years. (See Appendix B, Iowa Tests of Basic Skills/Tests of Achievement Proficiency, for more detailed information.)

Decision Question D1. Should the Title VII program be continued as it is, modified, or discontinued?

Information Need I2. Did the project meet its objectives?

Although the Title VII Program looked at the comparative English proficiency and achievement gains of tutored vs. nontutored project students on the LAB and ITBS/TAP, no objective criterion was measured during the program's first year of implementation.

In terms of modifying the tutor program, some changes in the tutor component might enhance effectiveness. The program might consider setting requirements of a minimum number of minutes per project student. Some project LEP A and B students were omitted from the data analysis because they had received less than fifteen minutes of tutoring over the year. For these students the time spent was probably too short to be effective. The program may also want to strengthen the training provided to tutors in ESL instructional strategies, since most do not know Spanish. Finally, some nonproject students were also served by the tutors. Project students might receive more service if this did not occur.

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